20 Berry Street Industrial Business Incentive Area

Environmental Assessment Statement

Prepared for:
Mihata Corporation

Prepared by:
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Draft
August 28, 2023

20 Berry Street
Industrial Business Incentive Area

Environmental Assessment Statement

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ENVIRONMENTAL ASSESSMENT STATEMENT (EAS) FULL FORM

City Environmental Quality Review
ENVIRONMENTAL ASSESSMENT STATEMENT (EAS) FULL FORM

Please fill out and submit to the appropriate agency (see instructions)

Part I: GENERAL INFORMATION

PROJECT NAME 20 Berry Street IBIA

1. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
24DCP038K	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)

2a. *Lead Agency Information*			**2b. *Applicant Information***		
NAME OF LEAD AGENCY			NAME OF APPLICANT		
NYC Department of City Planning			**Mihata Corporation**		
NAME OF LEAD AGENCY CONTACT PERSON			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON		
Stephanie Shellooe, AICP, Director, Environmental Assessment and Review Division			**Hadi Hajjar**		
ADDRESS **120 Broadway, 31st Floor**			ADDRESS **20 Berry Street**		
CITY **New York**	STATE **NY**	ZIP **10271**	CITY **Brooklyn**	STATE **NY**	ZIP **11211**
TELEPHONE **212.720.3328**	EMAIL **sshellooe@planning.nyc.gov**		TELEPHONE **212.929.5656**	EMAIL **mirtex@aol.com**	

3. *Action Classification and Type*

SEQRA Classification

☐ UNLISTED ☒ TYPE I: Specify Category (see 6 NYCRR 617.4 and NYC Executive Order 91 of 1977, as amended): **6 NYCRR 617.4(b)(6)(vi)**

Action Type (refer to CEQR Technical Manual Chapter 2, "Establishing the Analysis Framework" for guidance)

☒ LOCALIZED ACTION, SITE SPECIFIC ☐ LOCALIZED ACTION, SMALL AREA ☐ GENERIC ACTION

4. *Project Description*

Mihata Corporation (the "Applicant") is requesting a zoning map amendment, zoning text amendment, and special permit (collectively, the "Proposed Actions") that would facilitate an approximately 283,433-gross square foot (gsf) commercial and manufacturing development with a 9,690-square foot (sf) publicly accessible open space ("PAA space") on the Applicant-owned "Development Site" (i.e., Brooklyn Block 2283, Lots 25, 28, 31, 33, 35, 38, 41 and 43) in the Greenpoint neighborhood of Brooklyn Community District (CD) 1. Specifically, the Proposed Actions include: (i) a zoning map amendment to rezone the Development Site from a M1-1 district to a M1-2 district; (ii) a zoning text amendment to the New York City Zoning Resolution (ZR) Section 74-968, affecting the eastern part of Block 2283 to a depth of 200 feet measured from Berry Street (including the entirety of the Development Site), designating this area as an Industrial Business Incentive Area (IBIA); and (iii) a special permit pursuant to ZR Section 74-963 to increase the floor area ratio (FAR) by providing Required Industrial Uses, modify the public plaza requirements and modify the accessory parking and loading requirements. The approximately 40,000-sf, square Development Site has approximately 200 ft of frontage along each bounding street – Berry Street to the east, North 13th Street to the north, North 12th Street to the south – and a 200-ft lot line with Lot 1 to the west. The Proposed Actions would facilitate the development of a new 10-story (135-foot-tall), approximately 283,433-gsf (191,099-zoning square foot (zsf)) development containing approximately 184,561 gsf (151,057 zsf) of commercial uses (3.80 FAR), 32,990 gsf (32,000 zsf) of manufacturing uses (0.80 FAR), and 65,882 gsf (8,042 zsf) of accessory off-street parking uses (0.20 FAR) with a total built FAR of 4.8 (the "Proposed Project"). Collectively the commercial uses would comprise: approximately 47,171 gsf (20,488 zsf) of retail space (0.51 FAR) on the first two floors and cellar level (approximately 23,799 gsf would be below grade); approximately 124,224 gsf (118,051 zsf) of office space (2.97 FAR) on the ground floor and floors three through nine; and 13,166 gsf (12,518 zsf) of restaurant space (0.31 FAR) on the tenth floor. The manufacturing uses (light industrial uses and maker spaces required under the IBIA) would be located on the second and third floors with a dedicated freight elevator connecting to the ground floor loading berths. An approximately 9,690-gsf PAA space would front Berry Street with two auxiliary access points on North 12th and North 13th Streets. Approximately 65,882 gsf (8,042 zsf) of self-parking and mechanical space (0.20 FAR) would be located on the ground floor and in the cellar and sub-cellar levels. Access and egress to the 80 accessory off-street parking spaces and two loading berths would be provided by two existing, approximately 22-foot curb cuts on North 13th Street.Under the Reasonable Worst-Case Development Scenario (RWCDS), the Applicant's development site is the only projected development site to be analyzed in this EAS.

Project Location

BOROUGH Brooklyn	COMMUNITY DISTRICT(S) 1	STREET ADDRESS 20 Berry Street
TAX BLOCK(S) AND LOT(S) Block, 2283, Lots 25, 28, 31, 33, 35, 38, 41, and 43		ZIP CODE 11211
DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS Berry Street to the east, North 13th Street to the north, North 12th Street to the south, and the lot line with the adjacent property (Block 2283, Lot 1) to the west		
EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY M1-1		ZONING SECTIONAL MAP NUMBER 13a

5. *Required Actions or Approvals* (check all that apply)

***City Planning Commission*:** ☒ YES ☐ NO ☐ UNIFORM LAND USE REVIEW PROCEDURE (ULURP)

☐ CITY MAP AMENDMENT	☐ ZONING CERTIFICATION	☐ CONCESSION
☒ ZONING MAP AMENDMENT	☐ ZONING AUTHORIZATION	☐ UDAAP
☒ ZONING TEXT AMENDMENT	☐ ACQUISITION—REAL PROPERTY	☐ REVOCABLE CONSENT
☐ SITE SELECTION—PUBLIC FACILITY	☐ DISPOSITION—REAL PROPERTY	☐ FRANCHISE
☐ HOUSING PLAN & PROJECT	☐ OTHER, explain:	

☒ SPECIAL PERMIT (if appropriate, specify type: ☒ modification; ☐ renewal; ☐ other); EXPIRATION DATE:

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION ZR Section 43-12, ZR Section 44-21, ZR Section 37-713, ZR Section 37-714(b), ZR Section 37-76(b), ZR Section 44-52, ZR Section 74-968, ZR Section 74-963, ZR Section 74-964(b), ZR Section 74-964(c)

***Board of Standards and Appeals*:** ☐ YES ☒ NO

☐ VARIANCE (use)

☐ VARIANCE (bulk)

☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

***Department of Environmental Protection*:** ☐ YES ☒ NO ☐ Cogeneration Facility ☐ Title V Permit

Other City Approvals Subject to CEQR (check all that apply)

☐ LEGISLATION	☐ FUNDING OF CONSTRUCTION, specify:
☐ RULEMAKING	☐ POLICY OR PLAN, specify:
☐ CONSTRUCTION OF PUBLIC FACILITIES	☐ FUNDING OF PROGRAMS, specify:
☐ 384(b)(4) APPROVAL	☐ PERMITS, specify:
☐ OTHER, explain:	

Other City Approvals Not Subject to CEQR (check all that apply)

☐ PERMITS FROM DOT'S OFFICE OF CONSTRUCTION MITIGATION AND COORDINATION (OCMC)	☐ LANDMARKS PRESERVATION COMMISSION APPROVAL
	☐ OTHER, explain:

***State or Federal Actions/Approvals/Funding*:** ☐ YES ☒ NO If "yes," specify:

6. *Site Description:* *The directly affected area consists of the project site and the area subject to any change in regulatory controls. Except where otherwise indicated, provide the following information with regard to the directly affected area.*

***Graphics*:** *The following graphics must be attached and each box must be checked off before the EAS is complete. Each map must clearly depict the boundaries of the directly affected area or areas and indicate a 400-foot radius drawn from the outer boundaries of the project site. Maps may not exceed 11 x 17 inches in size and, for paper filings, must be folded to 8.5 x 11 inches.*

☒ SITE LOCATION MAP	☒ ZONING MAP	☒ SANBORN OR OTHER LAND USE MAP
☒ TAX MAP	☐ FOR LARGE AREAS OR MULTIPLE SITES, A GIS SHAPE FILE THAT DEFINES THE PROJECT SITE(S)	

☒ PHOTOGRAPHS OF THE PROJECT SITE TAKEN WITHIN 6 MONTHS OF EAS SUBMISSION AND KEYED TO THE SITE LOCATION MAP

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): 40,000 Waterbody area (sq. ft.) and type: N/A

Roads, buildings, and other paved surfaces (sq. ft.): 40,000 Other, describe (sq. ft.): N/A

7. *Physical Dimensions and Scale of Project* (if the project affects multiple sites, provide the total development facilitated by the action)

SIZE OF PROJECT TO BE DEVELOPED (gross square feet): 283,433

NUMBER OF BUILDINGS: 1 GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 283,433

HEIGHT OF EACH BUILDING (ft.): 135' (roof height) NUMBER OF STORIES OF EACH BUILDING: 10 stories

Does the proposed project involve changes in zoning on one or more sites? ☒ YES ☐ NO

If "yes," specify: The total square feet owned or controlled by the applicant: 40,000

The total square feet not owned or controlled by the applicant: N/A

Does the proposed project involve in-ground excavation or subsurface disturbance, including, but not limited to foundation work, pilings, utility lines, or grading? ☒ YES ☐ NO

If "yes," indicate the estimated area and volume dimensions of subsurface disturbance (if known): Excavation of cellar

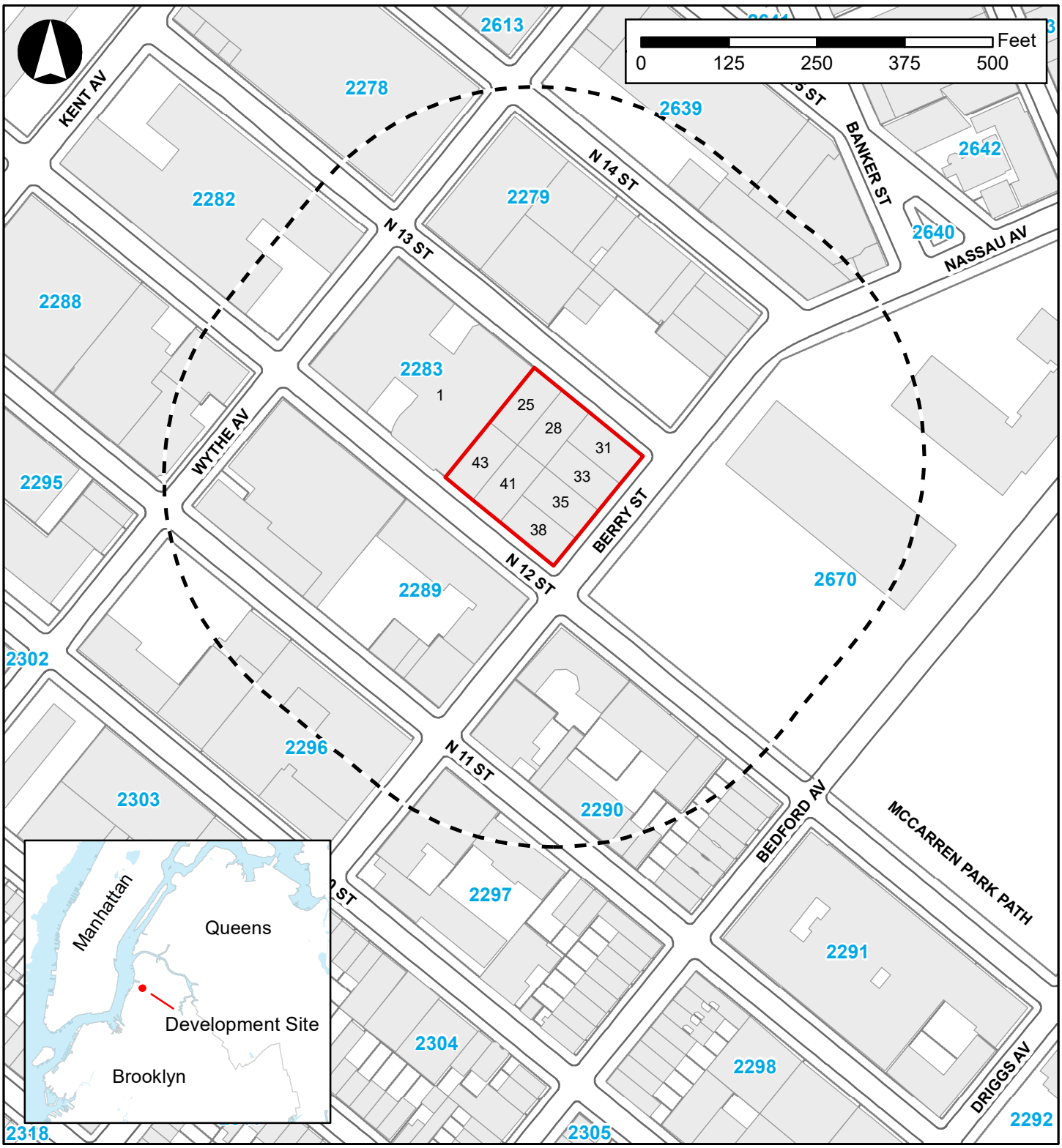
AREA OF TEMPORARY DISTURBANCE: 40,000 sq. ft. (width x length) VOLUME OF DISTURBANCE: 1,040,000 cubic ft. (width x length x depth)

AREA OF PERMANENT DISTURBANCE: 40,000 sq. ft. (width x length)

8. *Analysis Year* CEQR Technical Manual Chapter 2

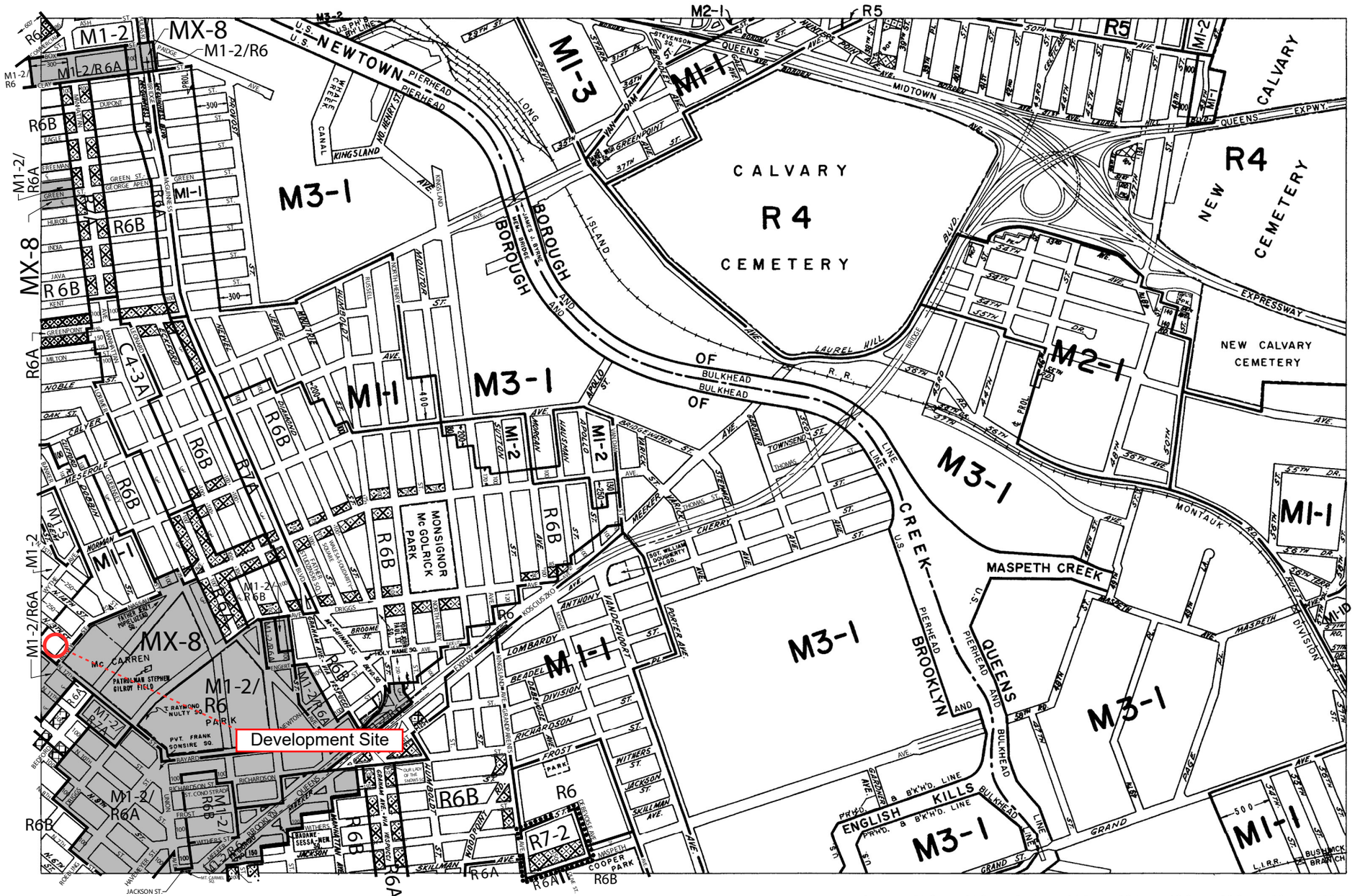
ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2025

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 18		
WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? ☒ YES	☐ NO	IF MULTIPLE PHASES, HOW MANY? N/A
BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: Single phase lasting approximately 18 months. Assuming certification and completion of the ULURP process by late-2023/early-2024, and a period of 18 months for construction over a single phase of construction, completion of the Proposed Project is expected in 2025.		
9. *Predominant Land Use in the Vicinity of the Project* (check all that apply) ☒ RESIDENTIAL ☒ MANUFACTURING ☒ COMMERCIAL ☒ PARK/FOREST/OPEN SPACE ☐ OTHER, specify:		



Legend

Development Site | 400-Feet Radius | Existing Building | 2283 Block | 28 Lot



ZONING MAP

THE NEW YORK CITY PLANNING COMMISSION

Major Zoning Classifications:

The number(s) and/or letter(s) that follows an R, C or M District designation indicates use, bulk and other controls as described in the text of the Zoning Resolution.

R – RESIDENTIAL DISTRICT

C – COMMERCIAL DISTRICT

M – MANUFACTURING DISTRICT

SPECIAL PURPOSE DISTRICT
The letter(s) within the shaded area designates the special purpose district as described in the text of the Zoning Resolution.

AREA(S) REZONED

Effective Date(s) of Rezoning:

11–23–2021 C 210480 ZMK

Special Requirements:

For a list of lots subject to CEQR environmental requirements, see APPENDIX C.

For a list of lots subject to "D" restrictive declarations, see APPENDIX D.

For Inclusionary Housing designated areas and Mandatory Inclusionary Housing areas on this map, see APPENDIX F.

MAP KEY

8d	9b	9d
12c	13a	13c
12d	13b	13d

N

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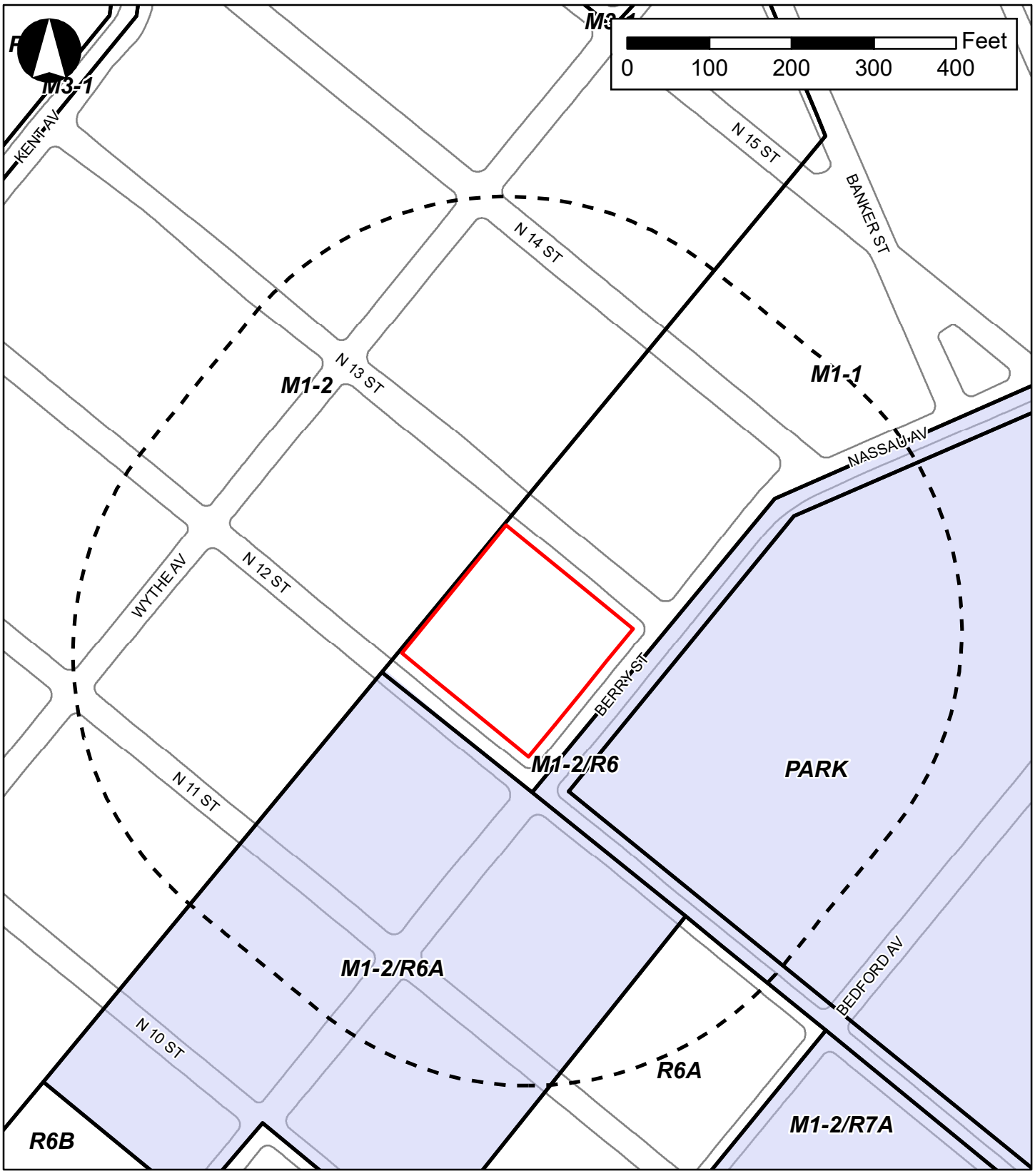
ZONING MAP 13a

C1-1 C1-2 C1-3 C1-4 C1-5 C2-1 C2-2 C2-3 C2-4 C2-5

NOTE: Where no dimensions for zoning district boundaries appear on the zoning maps, such dimensions are determined in Article VII, Chapter 6 (Location of District Boundaries) of the Zoning Resolution.

NOTE: Zoning information as shown on this map is subject to change. For the most up-to-date zoning information for this map, visit the Zoning section of the Department of City Planning website: www.nyc.gov/planning or contact the Zoning Information Desk at (212) 720-3291.

Existing Zoning



Source: NYCDCP (PLUTO 2021, Version I); DoITT (2020)

Legend

- Development Site
- Zoning District Boundaries
- Special Mixed Use District (MX-8)

NYC Finance

N W E S

NYC Digital Tax Map

Effective Date : 05-21-2014 10:26:59
End Date : Current

Brooklyn Block: 2283



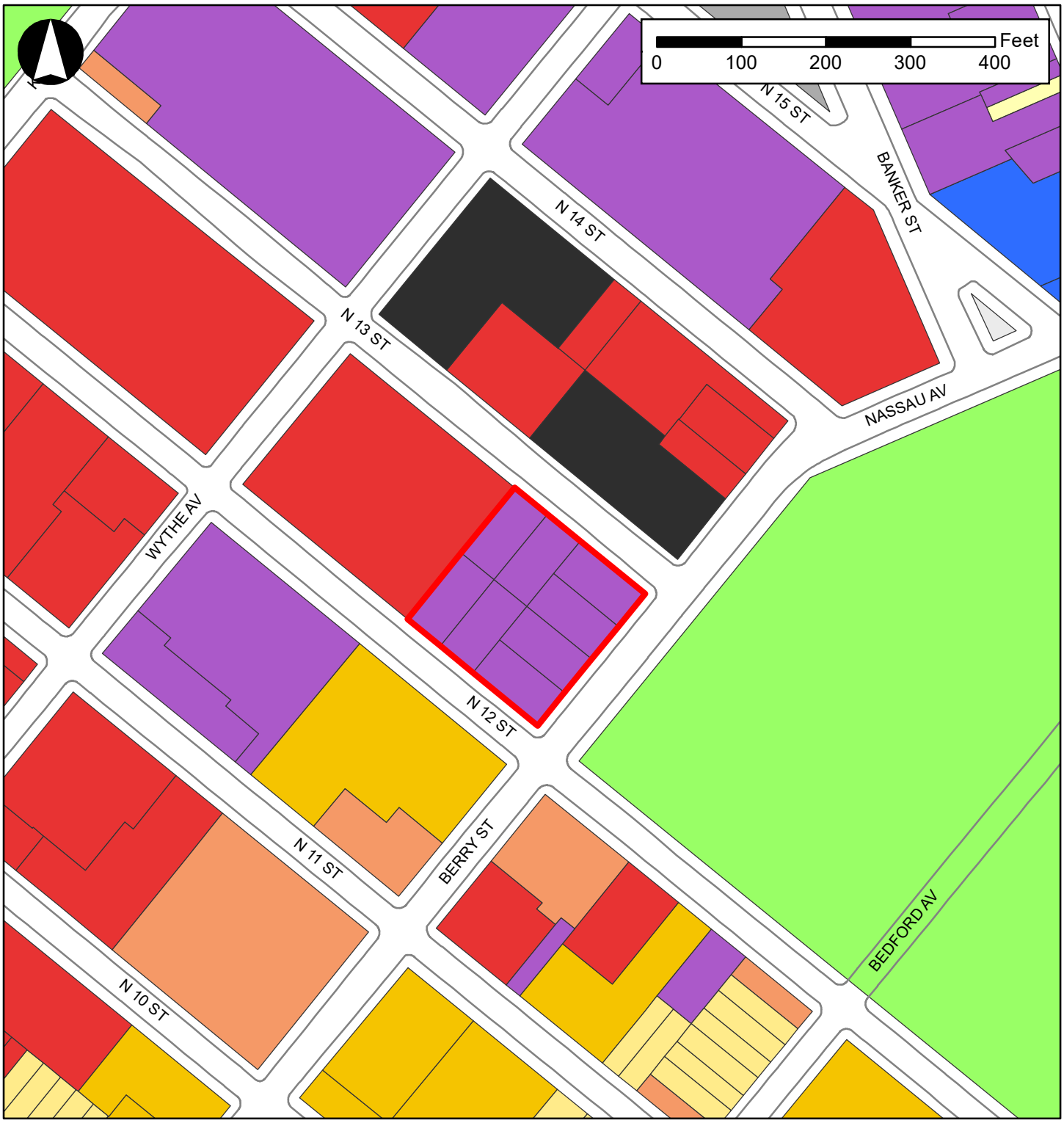
Legend

- Streets
- Miscellaneous Text
- Possession Hooks
- Boundary Lines
- Lot Face Possession Hooks
- Regular
- Underwater
- Tax Lot Polygon
- Condo Number
- Tax Block Polygon

- Development Site

0 4.75 9.5 19 28.5 38 Feet

Existing Land Uses



Source: NYCDCP (PLUTO 2021, Version I); DoITT (2020)

Legend

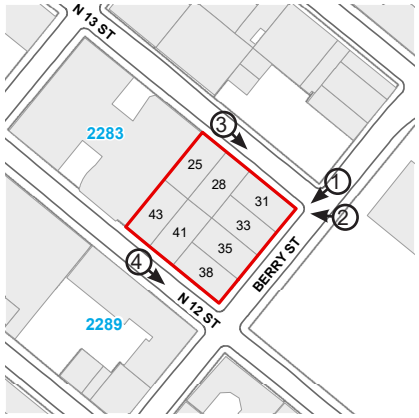
- Development Site

Land Use

- One and Two Family Buildings
- Multi-Family Walkup Buildings
- Multi-Family Elevator Building
- Mixed Commercial/Residential Buildings
- Commercial/Office Buildings
- Industrial/Manufacturing
- Transportation/Utility
- Public Facilities and Institutions
- Open Space
- Parking Facilities
- Vacant Land
- All Others or No Data



1) Looking southwest along Berry Street from N 13 Street. Development Site at right.





2) Looking west toward the Development Site from the intersection of Berry Street and N 13 Street.



3) Looking southeast along N 13 Street between Wythe Avenue and Berry Street. Development Site at right.

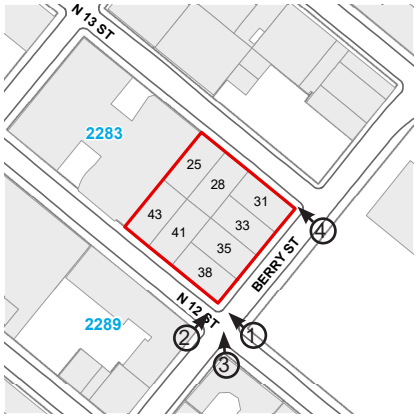


4) Looking southeast along N 12 Street between Wythe Avenue and Berry Street. Development Site at left.

Figure 6b
Site Photos - Taken 09/30/2021



1) Looking northwest along N 12 Street from Berry Street. Development Site at right.





2) Looking northeast along Berry Street from N 12 Street. Development Site at left.



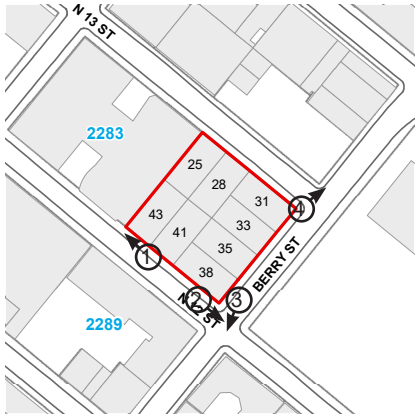
3) Looking north toward the Development Site from the intersection of Berry Street and N 12 Street.



4) Looking northwest along N 13 Street from Berry Street. Development Site at left.



1) Looking northwest along N 12 Street between Wythe Avenue and Berry Street. Development Site at right.





2) Looking southeast along N 12 Street from intersection with Berry Street. Development Site behind.



3) Looking southwest along Berry Street from intersection with N 12 Street. Development Site behind.



4) Looking northeast along Berry Street from intersection with N 13 Street. Development Site behind.

DESCRIPTION OF EXISTING AND PROPOSED CONDITIONS

The information requested in this table applies to the directly affected area. The directly affected area consists of the project site and the area subject to any change in regulatory control. The increment is the difference between the No-Action and the With-Action conditions.

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
LAND USE				
Residential	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify the following:				
Describe type of residential structures	N/A	N/A	N/A	
No. of dwelling units	N/A	N/A	N/A	
No. of low- to moderate-income units	N/A	N/A	N/A	
Gross floor area (sq. ft.)	N/A	N/A	N/A	
Commercial	☐ YES ☒ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify the following:				
Describe type (retail, office, other)	N/A	Retail	Office, Retail, Restaurant	+ Office, Retail, Restaurant
Gross floor area (sq. ft.)	N/A	30,000 gsf	184,561 gsf	+154,561gsf Total (Office: +124,224 gsf, Retail: +17,171 gsf, Restaurant: +13,166 gsf)
Manufacturing/Industrial	☒ YES ☐ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify the following:				
Type of use	Light Industrial/ Warehouse	Light Industrial/ Warehouse	IBIA Required Industrial Uses	
Gross floor area (sq. ft.)	40,000	10,000	32,990	+22,990
Open storage area (sq. ft.)	N/A	0	0	No Change
If any unenclosed activities, specify:	N/A	N/A	N/A	
Community Facility	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify the following:				
Type				
Gross floor area (sq. ft.)				
Vacant Land	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," describe:				
Publicly Accessible Open Space	☐ YES ☒ NO	☐ YES ☒ NO	☒ YES ☐ NO	
If "yes," specify type (mapped City, State, or Federal parkland, wetland—mapped or otherwise known, other):			Publicly Accessible Open Space (PAA)	+9,690 sf
Other Land Uses	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," describe:				
PARKING				
Garages	☐ YES ☒ NO	☐ YES ☒ NO	☒ YES ☐ NO	
If "yes," specify the following:				
No. of public spaces	N/A	N/A	0	No Change
No. of accessory spaces	N/A	N/A	80	+80
Operating hours	N/A	N/A	TBD	TBD
Attended or non-attended	N/A	N/A	Non-attended	Non-attended
Lots	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify the following:				
No. of public spaces				
No. of accessory spaces				
Operating hours				
Other (includes street parking)	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," describe:				

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
POPULATION				
Residents	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If "yes," specify number:				
Briefly explain how the number of residents was calculated:				
Businesses	☒ YES ☐ NO	☒ YES ☐ NO	☒ YES ☐ NO	
If "yes," specify the following:				
No. and type	Light Industrial/ Warehouse: 1	Light Industrial/ Warehouse: 2, Retail, 6	Office, Retail, Restaurant, Light Industrial: Number TBD	
No. and type of workers by business	Light Industrial/ Warehouse: 40	Light Industrial/ Warehouse: 10, Retail: 90	Office: 497, Retail: 142, Restaurant: 40, Light Industrial: 33, Parking: 2	+614 Total (Office: +497, Retail: +52, Restaurant: +40, Light Industrial: +23, Parking: +2)
No. and type of non-residents who are not workers				
Briefly explain how the number of businesses was calculated:	3 retail workers per 1,000 gsf; 3 restaurant workers per 1,000 gsf; 1 office worker per 250 gsf; 1 light industrial or warehouse worker per 1,000 gsf; 1 parking worker per 50 spaces			
Other (students, visitors, concert-goers, *etc.*)	☐ YES ☒ NO	☐ YES ☒ NO	☐ YES ☒ NO	
If any, specify type and number:				
Briefly explain how the number was calculated:				
ZONING				
Zoning classification	**M1-1**	**M1-1**	**M1-2 (IBIA)**	**Change from M1-1 to M1-2 (IBIA)**
Maximum amount of floor area that can be developed	**40,000 zsf Manufacturing (1.0 FAR); 40,000 zsf Commercial (1.0 FAR); 96,000 zsf Community Facilities (2.4 FAR)**	**40,000 zsf Manufacturing (1.0 FAR); 40,000 zsf Commercial (1.0 FAR); 96,000 zsf Community Facilities (2.4 FAR)**	**192,000 zsf Manufacturing (4.8 FAR); 160,000 zsf Commercial (4.0 FAR); 192,000 zsf Community Facilities (4.8 FAR)**	**+152,000 zsf Manufacturing (+3.8 FAR); +120,000 zsf Commercial (+3.0 FAR) l; +96,000 zsf Community Facilities (+2.4 FAR)**
Predominant land use and zoning classifications within land use study area(s) or a 400 ft. radius of proposed project	**Land Use: Manufacturing/ Industrial, Commercial, Residential, Open space; Zoning: M1-1, M1-2, M1-2 (IBIA), M1-2/R6-A, R6A**	**Land Use: Manufacturing/ Industrial, Commercial, Residential, Open space; Zoning: M1-1, M1-2, M1-2 (IBIA), M1-2/R6-A, R6A**	**Land Use: Manufacturing/ Industrial, Commercial, Residential, Open space; Zoning: M1-1, M1-2, M1-2 (IBIA), M1-2/R6-A, R6A**	**Increased M1-2 (IBIA), reduced M1-1; addition of new publicly accessible open space (the public plaza), as well as commercial office, retail, and restaurant space, and accessory off-street parking**

Attach any additional information that may be needed to describe the project.

If your project involves changes that affect one or more sites not associated with a specific development, it is generally appropriate to include total development projections in the above table and attach separate tables outlining the reasonable development scenarios for each site.

Part II: TECHNICAL ANALYSIS

INSTRUCTIONS: For each of the analysis categories listed in this section, assess the proposed project's impacts based on the thresholds and criteria presented in the CEQR Technical Manual. Check each box that applies.

- If the proposed project can be demonstrated not to meet or exceed the threshold, check the "no" box.
- If the proposed project will meet or exceed the threshold, or if this cannot be determined, check the "yes" box.
- For each "yes" response, provide additional analyses (and, if needed, attach supporting information) based on guidance in the CEQR Technical Manual to determine whether the potential for significant impacts exists. Please note that a "yes" answer does not mean that an EIS must be prepared—it means that more information may be required for the lead agency to make a determination of significance.
- The lead agency, upon reviewing Part II, may require an applicant to provide additional information to support the Full EAS Form. For example, if a question is answered "no," an agency may request a short explanation for this response.

	YES	NO
1. *LAND USE, ZONING, AND PUBLIC POLICY*: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	☐	☒
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☒	☐
(c) Is there the potential to affect an applicable public policy?	☒	☐
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach. **See Attachment C, "Land Use, Zoning, and Public Policy"**		
(e) Is the project a large, publicly sponsored project?	☐	☒
○ If "yes," complete a PlaNYC assessment and attach.		
(f) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries?	☒	☐
○ If "yes," complete the Consistency Assessment Form. See Attachment C, "Land Use, Zoning, and Public Policy"		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
○ Generate a net increase of more than 200 residential units *or* 200,000 square feet of commercial space?	☐	☒
▪ If "yes," answer *both* questions 2(b)(ii) and 2(b)(iv) below.		
○ Directly displace 500 or more residents?	☐	☒
▪ If "yes," answer questions 2(b)(i), 2(b)(ii), and 2(b)(iv) below.		
○ Directly displace more than 100 employees?	☐	☒
▪ If "yes," answer questions under 2(b)(iii) and 2(b)(iv) below.		
○ Affect conditions in a specific industry?	☐	☒
▪ If "yes," answer question 2(b)(v) below.		
(b) If "yes" to any of the above, attach supporting information to answer the relevant questions below. If "no" was checked for each category above, the remaining questions in this technical area do not need to be answered.		
i. Direct Residential Displacement		**N/A**
○ If more than 500 residents would be displaced, would these residents represent more than 5% of the primary study area population?	☐	☐
○ If "yes," is the average income of the directly displaced population markedly lower than the average income of the rest of the study area population?	☐	☐
ii. Indirect Residential Displacement		**N/A**
○ Would expected average incomes of the new population exceed the average incomes of study area populations?	☐	☐
○ If "yes:"		
▪ Would the population of the primary study area increase by more than 10 percent?	☐	☐
▪ Would the population of the primary study area increase by more than 5 percent in an area where there is the potential to accelerate trends toward increasing rents?	☐	☐
○ If "yes" to either of the preceding questions, would more than 5 percent of all housing units be renter-occupied and unprotected?	☐	☐
iii. Direct Business Displacement		**N/A**
○ Do any of the displaced businesses provide goods or services that otherwise would not be found within the trade area, either under existing conditions or in the future with the proposed project?	☐	☐
○ Is any category of business to be displaced the subject of other regulations or publicly adopted plans to preserve, enhance, or otherwise protect it?	☐	☐

	YES	NO
iv. Indirect Business Displacement	**N/A**	
○ Would the project potentially introduce trends that make it difficult for businesses to remain in the area?	☐	☐
○ Would the project capture retail sales in a particular category of goods to the extent that the market for such goods would become saturated, potentially resulting in vacancies and disinvestment on neighborhood commercial streets?	☐	☐
v. Effects on Industry	**N/A**	
○ Would the project significantly affect business conditions in any industry or any category of businesses within or outside the study area?	☐	☐
○ Would the project indirectly substantially reduce employment or impair the economic viability in the industry or category of businesses?	☐	☐
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
○ Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
i. Early Childhood Programs		
○ Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ If "yes," would the project result in a collective utilization rate of the Early Childhood Programs in the study area that is greater than 100 percent?	☐	☐
○ If "yes," would the project increase the collective utilization rate by 5 percent or more from the No-Action scenario?	☐	☐
ii. Public Schools		
○ Would the project result in 50 or more elementary or middle school students, or 150 or more high school students based on number of residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ If "yes," would the project result in a utilization rate of the elementary or middle schools that is equal to or greater than 100 percent?	☐	☐
○ If "yes," would the project generate 100 or more elementary or middle school students past the 100% utilization rate?	☐	☐
○ If "yes," would the project result in a utilization rate of the high schools that is equal to or greater than 100 percent?	☐	☐
○ If "yes," would the project increase the high school utilization rate by 5 percent or more from the No-Action scenario?	☐	☐
iii. Libraries		
○ Would the project result in a 5 percent or more increase in the ratio of residential units to library branches? (See Table 6-1 in Chapter 6)	☐	☒
○ If "yes," would the project increase the study area population by 5 percent or more from the No-Action levels?	☐	☐
○ If "yes," would the additional population impair the delivery of library services in the study area?	☐	☐
iv. Health Care Facilities		
○ Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
○ If "yes," would the project affect the operation of health care facilities in the area?	☐	☐
v. Fire and Police Protection		
○ Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
○ If "yes," would the project affect the operation of fire or police protection in the area?	☐	☐
4. *OPEN SPACE*: CEQR Technical Manual Chapter 7		
(a) Would the project change or eliminate existing open space?	☐	☒
(b) Would the project generate more than 200 additional residents or 500 additional employees?	☒	☐
5. *SHADOWS*: CEQR Technical Manual Chapter 8		
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more?	☒	☐
(b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?	☒	☐
(c) If "yes" to either of the above questions, attach supporting information explaining whether the project's shadow would reach any sunlight-sensitive resource at any time of the year. **See Attachment D, "Shadows"**		
6. *HISTORIC AND CULTURAL RESOURCES*: CEQR Technical Manual Chapter 9		

	YES	NO
(a) Does the proposed project site or an adjacent site contain any architectural and/or archaeological resource that is eligible for or has been designated (or is calendared for consideration) as a New York City Landmark, Interior Landmark or Scenic Landmark; that is listed or eligible for listing on the New York State or National Register of Historic Places; or that is within a designated or eligible New York City, New York State or National Register Historic District? (See the GIS System for Archaeology and National Register to confirm)	☐	☒
(b) Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?	☒	☐
(c) If "yes" to either of the above, list any identified architectural and/or archaeological resources and attach supporting information on whether the proposed project would potentially affect any architectural or archeological resources. **See Attachment B, "Supplemental Screening," and Appendix III, "New York City Landmarks Preservation Commission (LPC) Review Letter." According to LPC review letter dated October 24, 2022, the Project Area does not contain any architectural or archaeological significant resources; and while the LPC-designated and S/NR-eligible Hecla Iron Works building is within the 400-foot radius of the Project Area, the Proposed Actions are not anticipated to result in significant adverse impacts to this or any other historic resource.**		
7. *URBAN DESIGN AND VISUAL RESOURCES*: CEQR Technical Manual Chapter 10		
(a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning?	☒	☐
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	☐	☒
(c) If "yes" to either of the above, please provide the information requested in Chapter 10. **See Attachment E, "Urban Design"**		
8. *NATURAL RESOURCES*: CEQR Technical Manual Chapter 11		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11?	☐	☒
○ If "yes," list the resources and attach supporting information on whether the project would affect any of these resources.		
(b) Is any part of the directly affected area within the Jamaica Bay Watershed?	☐	☒
○ If "yes," complete the Jamaica Bay Watershed Protection Plan Project Tracking Form and submit according to its instructions.		
9. *HAZARDOUS MATERIALS*: CEQR Technical Manual Chapter 12		
(a) Would the proposed project allow commercial or residential uses in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?	☒	☐
(b) Would the proposed project introduce new activities or processes using hazardous materials and increase the risk of human or environmental exposure?	☒	☐
(c) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?	☐	☒
(d) Would the project require soil disturbance in a manufacturing area or any development on or near a manufacturing area or existing/historic facilities listed in the Hazardous Materials Appendix (including nonconforming uses)?	☒	☐
(e) Would the project result in the development of a site where there is reason to suspect the presence of hazardous materials, contamination, illegal dumping or fill, or fill material of unknown origin?	☒	☐
(f) Would the project result in development on or near a site that has or had underground and/or aboveground storage tanks (*e.g.*, gas stations, oil storage facilities, heating oil storage)?	☐	☒
(g) Would the project result in renovation of interior existing space on a site with the potential for compromised air quality; vapor intrusion from either on-site or off-site sources; or the presence of asbestos, PCBs, mercury or lead-based paint?	☐	☒
(h) Would the project result in development on or near a site with potential hazardous materials issues such as government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, coal gasification or gas storage sites, railroad tracks or rights-of-way, or municipal incinerators?	☒	☐
(i) Has a Phase I Environmental Site Assessment been performed for the site? **N/A See Attachment B, "Supplemental Screening"**	☐	☒
○ If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify: **N/A See Attachment B, "Supplemental Screening"**	☐	☐
(j) Based on the Phase I Assessment, is a Phase II Investigation needed? **N/A See Attachment B, "Supplemental Screening"**	☐	☐
10. *WATER AND SEWER INFRASTRUCTURE*: CEQR Technical Manual Chapter 13		
(a) Would the project result in water demand of more than one million gallons per day?	☐	☒
(b) If the proposed project located in a combined sewer area, would it result in at least 1,000 residential units or 250,000 square feet or more of commercial space in Manhattan, or at least 400 residential units or 150,000 square feet or more of commercial space in the Bronx, Brooklyn, Staten Island, or Queens?	☒	☐
(c) If the proposed project located in a separately sewered area, would it result in the same or greater development than that listed in Table 13-1 in Chapter 13?	☐	☒
(d) Would the project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	☐	☒

	YES	NO
(e) If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas, including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	☐	☒
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or contribute contaminated stormwater to a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
(i) If "yes" to any of the above, conduct the appropriate preliminary analyses and attach supporting documentation. **See Attachment F, "Water and Sewer Infrastructure"**		
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): **59,311**		
○ Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?	☐	☒
(b) Would the proposed project involve a reduction in capacity at a solid waste management facility used for refuse or recyclables generated within the City?	☐	☒
○ If "yes," would the proposed project comply with the City's Solid Waste Management Plan?	☐	☐
12. *ENERGY*: CEQR Technical Manual Chapter 15		
(a) Using energy modeling or Table 15-1 in Chapter 15, the project's projected energy use is estimated to be (annual BTUs): **58,206,901 MBtu**		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☒	☐
(b) If "yes," conduct the appropriate screening analyses, attach back up data as needed for each stage, and answer the following questions:		
○ Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☒	☐
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.*	☐	☒
○ Would the proposed project result in more than 200 subway/rail, bus trips, or 50 Citywide Ferry Service ferry trips per project peak hour?	☐	☒
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction), 200 subway/rail trips per station or line, or 25 or more Citywide Ferry Service ferry trips on a single route (in one direction), or 50 or more passengers at a Citywide Ferry Service landing?	☐	☐
○ Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☒	☐
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, bus stop, or Citywide Ferry Service landing?	☒	☐
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☒	☐
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed)	☒	☐
(c) Does the proposed project involve multiple buildings on the project site?	☐	☒
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
(f) If "yes" to any of the above, conduct the appropriate analyses and attach any supporting documentation. **See Attachment H, "Air Quality"**		
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) Would the proposed project result in the development of 350,000 square feet or more?	☐	☒
(d) If "yes" to any of the above, would the project require a GHG emissions assessment based on guidance in Chapter 18?	☐	☐
○ If "yes," would the project result in inconsistencies with the City's GHG reduction goal? (See Local Law 22 of 2008; § 24-803 of the Administrative Code of the City of New York). Please attach supporting documentation.	☐	☐

	YES	NO
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 114 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☐	☒
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒
(e) If "yes" to any of the above, conduct the appropriate analyses and attach any supporting documentation. **See Attachment I, "Noise"**		
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☒	☐
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a preliminary analysis, if necessary. **See Attachment B, "Supplemental Screening"**		
18. *NEIGHBORHOOD CHARACTER*: CEQR Technical Manual Chapter 21		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?	☒	☐
(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21, "Neighborhood Character." Attach a preliminary analysis, if necessary. **See Attachment B, "Supplemental Screening"**		
19. *CONSTRUCTION*: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
○ Construction activities lasting longer than two years?	☐	☒
○ Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	☐	☒
○ Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, *etc.*)?	☒	☐
○ Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	☐	☒
○ The operation of several pieces of diesel equipment in a single location at peak construction?	☐	☒
○ Closure of a community facility or disruption in its services?	☐	☒
○ Activities within 400 feet of a historic or cultural resource?	☒	☐
○ Disturbance of a site containing or adjacent to a site containing natural resources?	☐	☒
○ Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	☐	☒
(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination. **See Attachment B, "Supplemental Screening"**		

20. *APPLICANT'S CERTIFICATION*

I swear or affirm under oath and subject to the penalties for perjury that the information provided in this Environmental Assessment Statement (EAS) is true and accurate to the best of my knowledge and belief, based upon my personal knowledge and familiarity with the information described herein and after examination of the pertinent books and records and/or after inquiry of persons who have personal knowledge of such information or who have examined pertinent books and records.

Still under oath, I further swear or affirm that I make this statement in my capacity as the applicant or representative of the entity that seeks the permits, approvals, funding, or other governmental action(s) described in this EAS.

APPLICANT/REPRESENTATIVE NAME	SIGNATURE	DATE

PLEASE NOTE THAT APPLICANTS MAY BE REQUIRED TO SUBSTANTIATE RESPONSES IN THIS FORM AT THE DISCRETION OF THE LEAD AGENCY SO THAT IT MAY SUPPORT ITS DETERMINATION OF SIGNIFICANCE.

ATTACHMENT A

PROJECT DESCRIPTION

I. INTRODUCTION

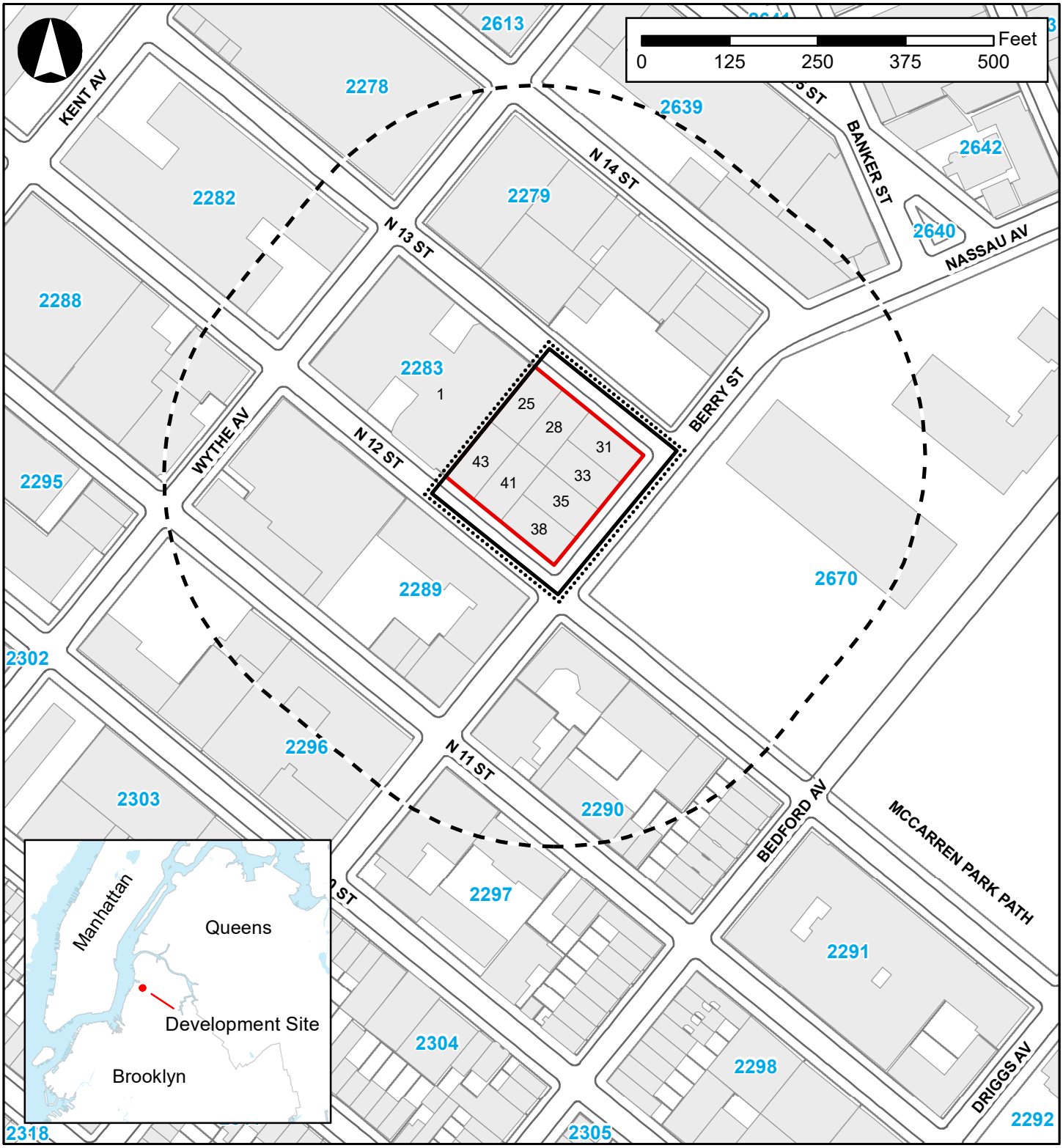
Mihata Corporation ("the Applicant") is requesting a zoning map and text amendment, and special permit (collectively, the "Proposed Actions") that would facilitate an approximately 283,433-gross-square-foot (gsf) commercial and manufacturing development with a 9,690-square foot (sf) publicly accessible open space ("PAA space") (collectively, the "Proposed Project") on Brooklyn Block 2283, Lots 25, 28, 31, 33, 35, 38, 41 and 43 (the "Development Site") in the Greenpoint neighborhood of Brooklyn Community District 1 (CD1). Specifically, the Proposed Actions include: (i) a zoning map amendment to rezone the Development Site from a M1-1 district to a M1-2 district; (ii) a zoning text amendment to the New York City Zoning Resolution Section (ZR §) 74-968, affecting the eastern part of Block 2283 to a depth of 200 feet measured from Berry Street (including the entirety of the Development Site), designating this area as an Industrial Business Incentive Area (IBIA); and (iii) a special permit pursuant to ZR §74-963 to increase the floor area ratio (FAR) by providing Required Industrial Uses, modify the public plaza requirements and modify the accessory parking and loading requirements. The approximately 40,000-sf, square Development Site has approximately 200 feet of frontage along each bounding street – Berry Street to the east, North 13th Street to the north, North 12th Street to the south – and a 200-foot side/rear lot line to the west. **Figure A-1** shows the Development Site location and surrounding area.

The Applicant is seeking the following discretionary approvals as part of the Proposed Actions:

- A zoning map amendment to rezone the Development Site (Block 2283, Lots 25, 28, 31, 33, 35, 38, 41 and 43) from M1-1 to M1-2;
- A zoning text amendment to ZR § 74-968, affecting the eastern part of Block 2283 to a depth of 200 feet measured from Berry Street (i.e., the entirety of the Development Site), designating this area an IBIA;
- A special permit pursuant to ZR § 74-963 et seq to increase the maximum permitted commercial and industrial FAR from 2.0 to approximately 4.8 FAR in a M1-2 district[1] to incentivize industrial uses on the Development Site;
- A special permit pursuant to ZR § 74-964(b) to (i) modify provisions set forth in ZR § 37-713 to allow PAA space to be located directly across from McCarren Park, (ii) modify the provisions set forth in ZR § 37-714(b) to allow the major portion of the PAA space to front on an east-facing street line, and (iii) modify the provisions set forth in ZR § 37-76(b) to allow the entrance to the principal use of the Proposed Project to be located more than 10 feet from the major portion of the PAA space and to allow the building's entrance and lobby to occupy less than 20 feet of the frontage of the PAA space;
- A special permit pursuant to ZR § 74-964(c) to modify the accessory off-street parking requirement at the Development Site to be reduced from 724 (as required by ZR § 44-21) to 80 spaces, and to modify the loading berth requirement at the Development Site to be reduced from seven berths (as required by ZR § 44-52) to two.

[1] For M1-2 districts absent IBIA regulations, only community facility uses are permitted a maximum FAR of 4.8, whereas the maximum permitted FAR for commercial and industrial uses is 2.0.

Figure A-1
Project Location



Legend

- Development Site
- Proposed Rezoning Area
- 2283 Block
- 400-Feet Radius
- Existing Building
- 28 Lot

- By designating the Development Site as an IBIA, the Zoning Text Amendment would make the IBIA special permit pursuant to ZR § 74-962 available on the Development Site. As such, the Proposed Project would provide up to approximately 32,990 gsf (32,000 zoning square feet [zsf]) of Required Industrial Uses (0.8 FAR) and up to approximately 83,630 gsf (80,000 zsf) of Incentive Uses (2.0 FAR)[2] to occupy floor area beyond that permitted by the proposed M1-2 district use limitations at the Development Site (see below for more info on IBIA regulations).

The Proposed Actions, which are subject to environmental review under City Environmental Quality Review (CEQR) regulations and guidance, would facilitate the development of a new approximately 283,433-gsf (192,000-zsf) development containing approximately 184,561 gsf (151,057 zsf) of commercial uses (3.80 FAR), 32,990 gsf (32,000 zsf)of manufacturing uses (0.80 FAR), and 65,882 gsf (8,042 zsf) of accessory off-street parking uses and mechanical space (0.20 FAR) with a total built FAR of 4.8 (the "Proposed Project"). The commercial uses of the proposed 10-story building would include: approximately 47,171 gsf (20,488 zsf) of retail space (0.51 FAR) on the first two floors and cellar level (approximately 23,799 gsf would be below grade), approximately 124,224 gsf (118,051 zsf) of office space (2.97 FAR) on the ground floor and floors three through nine (approximately 3,065 gsf would be on the ground floor), and 13,166 gsf (12,518 zsf) of restaurant space (0.31 FAR) on the tenth floor. The manufacturing uses (industrial uses and maker spaces required under the IBIA) would be located on the second and third floors with a dedicated freight elevator connecting to the ground floor loading berths. An approximately 9,690-sf PAA space would front Berry Street with two auxiliary access points on North 12th and North 13th Streets. The PAA space would be comprised of a 4,800-sf public plaza within the central portion of the PAA space which qualifies the Proposed Project for a 25-foot building height bonus, whereas the remainder of the open space would comprise of 4,890-sf of general PAA space (which does not generate a bonus but will be improved with amenities and available to the public). In addition, approximately 65,882 gsf (8,042 zsf) of self-parking and mechanical space (0.20 FAR) would be located on the ground floor and in the cellar and sub-cellar levels. Access and egress to the proposed 80 accessory off-street parking spaces would be provided by two existing, approximately 22-foot curb cuts on North 13th Street.

Overview of IBIA Regulations

The IBIA zoning regulations were established in 2016 with the approval of the 25 Kent Avenue project application (N 160126 ZRK et al, adopted May 25, 2016), and were modified in 2021 related to the 42-11 9th Street application (N200304ZRQ et al, adopted March 18, 2021). The 2016 action amended the ZR text with a new section, ZR § 74-96, allowing modifications to the use, bulk, accessory off-street parking and loading requirements for properties within IBIAs, by means of City Planning Commission (CPC) special permits pursuant to ZR § 74-962 and ZR § 74-963, as then defined. The 2021 IBIA modifications consolidated what had been two separate special permits, one for floor area increase and one for parking/loading modifications, into a streamlined single special permit more typical of similar special permits available in Article VII, Chapter 4 of the ZR. The permitted modifications allowed under the special permit are now outlined in ZR § 74-963 and 74-964. Under both the original and modified text, the ZR § 74-96 IBIA special permit incentivizes the construction of commercial and manufacturing buildings that allocate a portion of their floor area to certain light industrial uses, allowing additional floor area devoted to certain types of commercial and light industrial uses.

[2] It should be noted that while the provision of 80,000 zsf (2.0 FAR) of Incentive Uses would satisfy the IBIA requirement for commercial uses, a greater amount of commercial space is being proposed, including approximately 47,171 gsf (20,488 zsf) of retail space (0.51 FAR), 124,224 gsf (118,051 zsf) of office space (2.97 FAR), and 13,166 gsf (12,518 zsf) of restaurant space (0.31 FAR), for a total of 184,561 gsf (151,057 zsf) of commercial floor area (3.80 FAR).

The key elements of the IBIA regulations as they relate to use and density include:

- **IBIA Use Categories**: In compliance with the ZR § 74-961 and 74-963 special permit regulations, building floor area in IBIA developments is divided into three categories: "base M1-2 district uses," "Required Industrial Uses" and "Incentive Uses."

- **Base M1-2 District Uses**: These include all commercial and manufacturing uses permitted as-of-right in M-2 districts. IBIA developments are permitted up to 2.0 FAR of base M1-2 district uses, as is the case for as-of-right M1-2 developments.

- **Required Industrial Uses**: These consist of certain light industrial uses in Use Groups 11A, 16A, 16B, 17B, and 17C, as defined in ZR § 32-20, ZR § 32-25, and ZR § 42-14, as well as beverages, alcoholic or breweries (Use Group 18A) as listed in ZR § 42-15. For each 1-sf of floor area devoted to Required Industrial Uses a ZR § 74-96 special permit allows a 3.5-sf increase in maximum allowable floor area beyond the 2.0 FAR limitation on commercial and manufacturing uses of the underlying M1-2 district, up to a maximum of 0.8 FAR, that can be occupied by Incentive Uses if certain design, envelope and urban design findings are met. In no event may the resulting FAR exceed the maximum 4.8 FAR permitted in the M1-2 district.

- **Incentive Uses**: These include all uses permitted by the underlying M1-2 district, with the following exceptions: transient hotels in Use Group 5 (as defined in ZR § 32-14); retail and service establishment uses in Use Groups 6A and 6C (as defined in ZR § 32-15); transient accommodation uses in Use Group 7A (as defined in ZR § 32-16); automotive service establishment uses in Use Group 8C (as defined in ZR § 32-17); uses in Use Group 10A and any retail spaces accessory to wholesale offices or showrooms, with storage restricted to samples in Use Group 10B (as defined in ZR § 32-19); uses in Use Groups 12 and 13 (as defined in ZR § 32-21 and ZR § 32-22); and moving or storage offices with no limitation as to storage or floor area per establishment, packing or crating establishments, and warehouses (as defined in ZR § 32-25).

- **Maximum Permitted FAR by Category**: Accordingly, a building developed pursuant to an IBIA ZR § 74-96 special permit that fully utilizes the maximum permitted floor area would contain 2.0 FAR of base M1-2 district uses; 0.8 FAR of Required Industrial Uses; and 2.0 FAR of Incentive Uses, for a total FAR of 4.8, which is equivalent to the maximum permitted FAR in M1-2 districts for community facility uses.

As noted above, the first IBIA approval was of the 25 Kent Avenue project application (C 160124 ZSK et al, effective July 14, 2016). That action amended the ZR text to establish the IBIA regulations and designate the first IBIA on the block bounded by North 13th Street, Wythe Avenue, North 12th Street, and Kent Avenue, which facilitated a mixed-use development located in an M1-2 zoning district within the IBIA at 19-25 Kent Avenue (Block 2282, Lot 1). Along with the text change, special permits were granted to modify the permitted floor area, public plaza and parking requirements in connection with the 25 Kent Avenue development. A revised negative declaration for 25 Kent Avenue was issued May 20, 2016 (CEQR No. 16DCP065K).

To date, two other IBIA special permit projects for properties near the Development Site have been approved by the CPC. The 12 Franklin Street application, which was adopted on January 9, 2019, included a zoning text amendment (N180388ZRK) to designate a new IBIA (Block 2614, Lots 1, 3, 8, 16, 19, and 24) and special permit applications (C180387ZSK and C180389ZSK) to facilitate the 167,174 gsf (134,000-zsf)

mixed office, retail, and light industrial development on three of the tax lots (Block 2614, Lots 1, 3, and 8). In addition to the IBIA floor area increase special permit, a special permit to waive 353 parking spaces and one loading berth was granted as part of the application. No public open space was proposed as part of the 12 Franklin Street project. A negative declaration for 12 Franklin Street was issued on August 20, 2018 (CEQR No. 18DCP099K) and the application was approved February 28, 2019.

The third IBIA application was for a property located at 103 North 13th Street. Similar to the Franklin Street project, the North 13th Street application included a zoning text amendment (N180388ZRK) to designate the western part of the block bounded by North 14th, Berry Street, North 13th Street, and Wythe Avenue (Block 2279, Lots 1, 9, 13, 34, and parts of Lots 15 and 30) as a new IBIA, as well as special permit applications (C190085ZSK and C1990084ZSK) to facilitate a new IBIA development on Lot 34. This application sought approval for a 75,298 gsf (59,986 zsf) mixed office, retail, and light industrial building. In addition, the application included a special permit to waive 139 parking spaces (100% of the required parking) and one loading berth. As with the 12 Franklin project, no public open space was proposed as part of the North 13th Street development. A negative declaration for 103 North 13th Street was issued on October 15, 2018, the application was adopted on February 27, 2019, and the project is currently in construction.

Additional applications for IBIA special permits have been filed, but not approved, for two other projects in CD 1: One Wythe Avenue and 29-42 Wythe Avenue. One Wythe Avenue is currently in public review, with anticipated completion of the process in January 2022. One Wythe Avenue (Block 2641, Lots 1, 3, and 4) would be the fourth IBIA special permit granted within this area of Brooklyn and would facilitate a 75,289-gsf commercial and industrial building. No public open space is proposed. This IBIA application also includes a waiver of 246 parking spaces and three loading berths. The 29-41 Wythe Avenue project (Block 2279, Lot 1) would be the fifth IBIA special permit in this area and it would be located within the IBIA established under 103 North 13th Street application. 29-41 Wythe Avenue would contain 214,915 gsf of commercial and industrial uses and 62 parking spaces. No public open space is proposed. The application for 29-41 Wythe Avenue has been filed, but has not entered into public review.

Finally, although not in CD1, the CPC recently approved a 21-story IBIA development in Long Island City, Queens.

II. SITE BACKGROUND AND EXISTING CONDITIONS

Proposed Rezoning Area/Development Site

The Development Site comprises approximately 40,000 sf of lot area and is bounded by Berry Street to the east, North 12th Street to the south, North 13th Street to the north, and the lot line of the adjacent Lot 1 (Block 2283) to the west. The site is currently developed with eight single story warehouse/light industrial buildings which were constructed in 1991 and are built to the full extent of the lot lines. At present, the Applicant is the sole owner of all lots within the Development Site, of which only two lots (i.e., Lots 28 and 31) are currently occupied by the Applicant with light industrial uses, while the remainder of the lots within the Development Site (i.e., Lots 25, 33, 35, 38, 41, and 43) are unoccupied. Access to each of the eight buildings is provided by a loading berth and its associated curb cut (three on North 13th Street, three on Berry Street and two on North 12th Street). No accessory parking currently exists at the site. Sidewalks adjacent to the Development Site range from approximately 12 feet in width on Berry and North 13th Streets to 14.5 feet wide on North 12th Street. As the Development Site comprises eight tax

lots, the addresses associated with the site range along each frontage. **Table A-1** below provides a summary of information about the site.

Table A-1: Development Site Condition

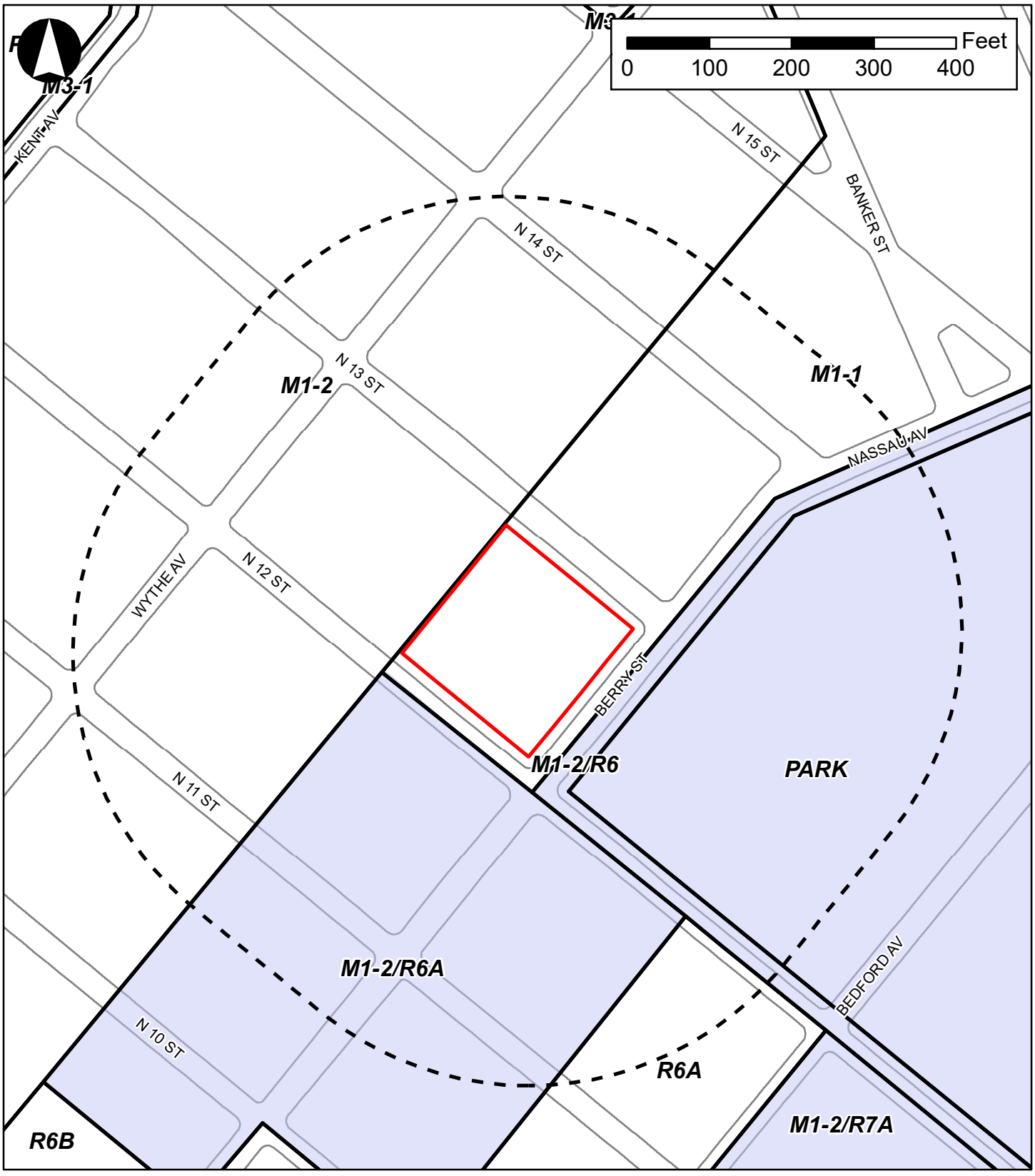
Block	Lot	Address	Street Frontage	Existing Condition	Zoning	Lot Area
2283	25	132 North 13th Street	50'	Single-story warehouse/industrial	M1-1	5,000 sf
2283	28	120 North 13th Street	50'	Single-story warehouse/industrial with mezzanine level	M1-1	5,000 sf
2283	31	20 Berry Street	50'	Single-story warehouse/industrial with mezzanine level	M1-1	5,000 sf
2283	33	24 Berry Street	50'	Single-story warehouse/industrial with mezzanine level	M1-1	5,000 sf
2283	35	28 Berry Street	50'	Single-story warehouse/industrial with mezzanine level	M1-1	5,000 sf
2283	38	32 Berry Street	50'	Single-story warehouse/industrial with mezzanine level	M1-1	5,000 sf
2283	41	129 North 12th Street	50'	Single-story warehouse/industrial with mezzanine level	M1-1	5,000 sf
2283	43	125 North 12th Street	50'	Single-story warehouse/industrial with mezzanine level	M1-1	5,000 sf

As shown in **Figure A-2**, the Development Site is currently mapped within an M1-1 zoning district. Previously the site was rezoned M3-1 and was zoned as part of a 1976 rezoning of a group of blocks west of McCarren Park. M1 districts are mapped in a range of neighborhoods and are often buffers between M2 and M3 districts (medium to heavy industrial areas) and adjacent residential and/or commercial districts. Buildings in M1 districts can range from multistory lofts to one- and two-story warehouses characterized by loading bays. Nearly all industrial uses are allowed in M1 districts if they meet the M1 performance standards. Typical uses include light industrial uses such as woodshops, repair shops, wholesale services and storage facilities, as well as office and hotels. Floor area ratio (FAR) in M1 districts ranges from 1.0 to 10.0. Building heights and setbacks are governed by the sky exposure plane, a virtual sloping plane that begins at a specified height above the street line and rises inward over the zoning lot at a ratio of vertical distance to horizontal distance set forth in district regulations. A building may not penetrate the sky exposure plane, which is designed to provide light and air at street level. M1-1 districts permit a maximum FAR of 1.0 for commercial and manufacturing uses and 2.40 for community facilities. Residential uses are not permitted. A maximum base height of up to 30 feet is permitted in M1-1 districts, then the application of a sky exposure plane is required.

The Development Site is located within the Greenpoint-Williamsburg Industrial Business Zone (IBZ), which is discussed further in the following section.

Additionally, as detailed in the New York State Department of Environmental Conservation (NYSDEC) Record of Decision (ROD) for the Development Site and adjacent Lot 1, the collective area was identified as the former site of the Wythe Avenue Station – a manufactured gas plant (MGP) (refer to **Appendix I**). As disposal of hazardous wastes at the site could result in threats to public health and the environment, the NYSDEC, in consultation with the New York State Department of Health (NYSDOH), selected a remedy for the site which was established through the remedy selection process stated in 6 NYCRR Part 375 (see **Attachment B, "Supplemental Screening"** for more detail on the 'Summary of the Selected Remedy').

Existing Zoning



Source: NYCDCP (PLUTO 2021, Version I); DoITT (2020)

Legend

- Development Site
- 400-foot Radius
- Zoning District Boundaries
- Special Mixed Use District (MX-8)

Neighborhood Context

The Development Site, which straddles the boundary between the Greenpoint and Williamsburg neighborhoods, is directly across Berry Street from the 35-acre McCarren Park to the east and is located a few blocks southeast of Bushwick Inlet Park, located on the shores of the East River. As shown in **Figure A-3**, the area surrounding the Development Site is characterized by a wide variety of land uses and various building types including 1- to 2-story commercial/manufacturing, low rise mixed residential and commercial and several mid- and high-rise hotels (the 22-story, 250-foot-tall William Vale Hotel is located on the same block as the Development Site on the lot to the immediate west [Lot 1]). The built environment within a 400-foot radius of the site reflect longstanding manufacturing and industrial buildings (some of which have been converted to commercial uses). Commercial uses can be found primarily in the north and western portions of the 400-foot radius and include creative workspace, restaurants, retail spaces and studios. Residential uses within a 400-foot radius are largely concentrated to the blocks southeast and southwest of the Development Site which are generally bounded by North 12th Street, Bedford Avenue, North 10th Street and Wythe Avenue. In addition, the New York City Landmarks Preservation Commission (LPC)-listed and State and National Registrar of Historic Places (S/NR)-eligible Hecla Iron Works building is located within the 400-foot radius. Located at 100-118 North 11th Street (Brooklyn Block 2296, Lot 14), the four-story Hecla Iron Works building was constructed in 1896-97 and features cast-iron panels enriched by simple classical details on the front and rear elevations of the building (see **Attachment B, "Supplemental Screening"** for a more detailed description of this historic resource).

Beyond the 400-foot radius, the area to the north and northeast of the Development Site is the residential neighborhood of Greenpoint and to the south is the mixed office, industrial and residential neighborhood of Williamsburg.

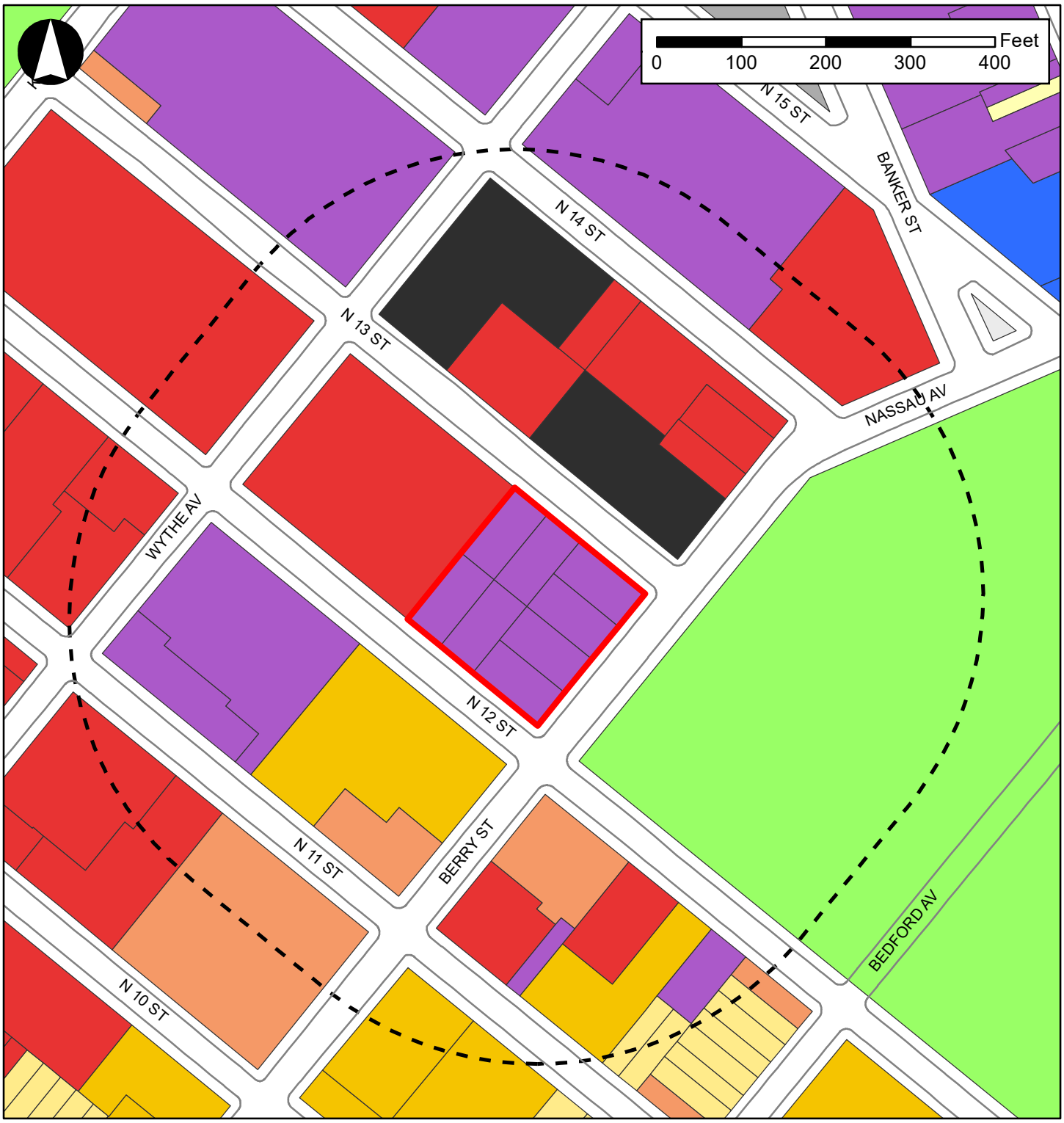
Although the Development Site is zoned M1-1, an M1-2 district is mapped directly west of the site and contains the western half of the block where the site is located (Block 2283). Directly south of the Development Site an M1-2/R6-A district is mapped with R6A and R6B districts beyond that. As noted above, IBIA zoning text designations were established for 25 Kent Avenue and 103 North 13th Street, in 2016 and 2019, respectively. Also in 2016, a C2-4 commercial overlay was added to the existing R6A district south of the site in 2016.

The surrounding Greenpoint-Williamsburg area has seen significant changes since 2005, including new hotel, retail, office and residential development. South of the Development Site, the 8-story, 70-key Wythe Hotel (at 75 North 11th Street) opened in 2012 and the 22-story, 183-key William Vale hotel – which also includes restaurant, retail and community facility space – opened in 2016. In 2013, Amazon developed a 40,000-gsf photo studio and office space at 35 Kent Avenue. Additionally, the eight-story, approximately 405,156-gsf 25 Kent Avenue development one block to the west of the Development Site was completed in 2020; the aforementioned first approved IBIA project.

Greenpoint-Williamsburg Industrial Business Zone

As noted above, the Development Site is located within the Greenpoint-Williamsburg IBZ. The IBZ covers over twenty blocks (or portions thereof) in the Greenpoint and Williamsburg neighborhoods and is generally bounded by Kent Avenue/Franklin Street to the west, Calyer Street and Meserole Avenue to the north, Banker, Dobbin and Guernsey Streets to the east and Nassau Avenue/Berry Street and North 9th Streets to the south. IBZs offer various incentives to prevent industrial uses from relocating outside of the

Figure A-3
Existing Land Uses



Source: NYCDCP (PLUTO 2021, Version I); DoITT (2020)

Legend

- Development Site
- 400-Foot Radius

Land Use

- One and Two Family Buildings
- Multi-Family Walkup Buildings
- Multi-Family Elevator Building
- Mixed Commercial/Residential Buildings
- Commercial/Office Buildings
- Industrial/Manufacturing
- Transportation/Utility
- Public Facilities and Institutions
- Open Space
- Parking Facilities
- Vacant Land
- All Others or No Data

City and represent a commitment by the City not to rezone these areas for residential uses. Within an IBZ, Industrial Business Solutions Providers offer industrial firms guidance accessing appropriate financial and business assistance programs, navigating and complying with regulatory requirements, developing workforces, and ensuring the neighborhood is well-maintained. The Industrial Business Solutions Provider for the Greenpoint-Williamsburg IBZ is Evergreen: Your North Brooklyn Business Exchange.

Area Transportation

The area surrounding the Development Site is served by several public transit options. The Nassau Avenue G subway station (located to the at the intersection of Nassau and Manhattan Avenues) and the Bedford Avenue L subway station (located at the intersection of Bedford Avenue and North 7th Street) are approximately 0.28 miles to the northeast and southwest of the Development Site, respectively. In addition, the B32 bus (connecting Williamsburg Bridge Plaza and Long Island City) runs along Franklin Street/Kent Avenue and Wythe Avenue, the B62 bus (connecting Downtown Brooklyn/Fulton Mall and Long Island City) runs along Bedford and Driggs Avenues and the B43 bus (connecting Lefferts Gardens/Prospect Park and Greenpoint) runs along Manhattan Avenue and Graham Avenue. The B32 bus also makes a wide variety of connections to other local bus lines along the Broadway commercial corridor in Brooklyn, including connections with the B24, B39, B46, B60, B62, Q54 and Q59 bus lines. The North Williamsburg landing for the NYC Ferry East River route is located less than 0.5 miles to the southwest of the Development Site at the western terminus of North 5th Street. Several Citi Bike stations are nearby: at the corner of North 15th Street and Wythe Avenue, at North 11th Street and Kent Avenue, and along the edge of McCarren Park near the corner of North 12th Street and Bedford Avenue. The Development Site is also accessible by foot from the surrounding neighborhoods with no significant pedestrian obstacles, such as highways or railroad tracks. Taken together, these transit options and facilities provide access to the Development Site from much of North Brooklyn and beyond.

III. DESCRIPTION OF PROPOSED ACTIONS

The Proposed Actions include a zoning map amendment, a zoning text amendment, and a special permit, which are described in further detail below.

Zoning Map Amendment

The proposed zoning map amendment would rezone the Proposed Rezoning Area (coterminous with the Development Site, including all of Block 2283, Lots 25, 28, 31, 33, 35, 38, 41 and 43) from M1-1 to M1-2, which would increase the permitted FAR from 1.0 to 2.0 for commercial and industrial uses, and from 2.4 to 4.8 for certain community facility uses, thus allowing for additional development of these uses than could be provided under existing conditions. As shown in **Figure A-1**, the Proposed Rezoning Area encompasses the entirety of the Development Site.

Zoning Text Amendment

The Applicant is proposing a zoning text amendment which would affect ZR §74-968 (Maps of Industrial Business Incentive Areas). The proposed zoning text amendment would establish a new IBIA coterminous with the Development Site (Block 2283, Lots 25, 28, 31, 33, 35, 38, 41 and 43). By designating the Development Site as an IBIA, the Zoning Text Amendment would make the IBIA special permit pursuant to ZR § 74-962 available on the Development Site, thus allowing for the pursuit of existing special permits that are available in IBIAs (described in detail below).

Special Permit

A ZR § 74-96 special permit for the Development Site pursuant to the provisions of ZR § 74-963 (Permitted Floor Area Increase) and ZR § 74-964 (Modifications in Conjunction with a Floor Area Increase) would allow for an FAR increase for certain uses to 4.8 if Required Industrial Uses are provided, thereby modifying the proposed, underlying M1-2 district's maximum permitted FAR 2.0 for commercial and industrial uses under ZR § 43-12 (Maximum Floor Area Ratio). In addition to the 2.0 FAR of as-of-right commercial (office, retail, restaurant) uses, the Proposed Project would provide sufficient Required Industrial Uses (0.8 FAR of industrial uses) to allow the Development Site the maximum Incentive Use (2.0 FAR of additional commercial office uses) to reach a total of 4.8 FAR.

This special permit would also modify public plaza requirements within Industrial Business Incentive Area 1 pursuant to ZR § 74-964(b) which would be binding on the site. Specifically, the Applicant seeks to modify the provisions set forth in (a) ZR § 37-713 to allow the publicly accessible open space to be located directly across from McCarren Park; (b) ZR § 37-714(b) to allow the major portion of the publicly accessible open space to front on an east-facing street line despite the zoning lot having more than 40 feet of frontage on the south-facing street line; and (c) ZR § 37-76(b) to allow the public entrance to the principal use of the building be located more than 10 feet from the major portion of the publicly accessible open space and to allow the building entrance and lobby to occupy less than 20 feet of the frontage of the public plaza. In addition, as the 9,690-sf PAA space (which is approximately 25 percent of the Development Site) is comprised of a 4,800-sf public plaza within the central portion of the PAA space (making up approximately 12 percent of the Development Site), the Proposed Project would qualify for a 25-foot building height bonus pursuant to ZR § 74-965(d)(2), thus allowing for the maximum building height of the Proposed Project to be increased to 135 feet (described in greater detail below in Section V).

The special permit would also modify the number of loading berths and parking spaces required for the Proposed Project pursuant to ZR § 74-964(c) under the proposed M1-2 zoning. Under the special permit, the required loading docks to be provided at the Development Site would be reduced from seven to two, and the required accessory off-street parking spaces would be reduced from approximately 724 accessory spaces to 80 accessory parking spaces. Without this modification, the Development Site would be required to provide approximately seven loading berths and up to 724 accessory parking spaces.

IV. PURPOSE AND NEED OF THE PROPOSED ACTIONS

The special permit available to properties located in IBIAs facilitate the development of new buildings with increased density of certain types of commercial and light industrial uses under urban design guidelines and protections for industrial uses. The purpose of the Proposed Actions are to encourage job creation, provide increased walk-to-work opportunities, encourage increased density of appropriate land uses, strengthen the economic base of the City, conserve the value of land, contribute to a diverse mix of business uses and employment in the area, and protect the City's tax revenues.

Through New York Works[3], the City seeks to create 100,000 good jobs over ten years. As one strategy for this job growth, the City will create 25,000 jobs by supporting growth in office districts in Manhattan and the emerging commercial centers across the five boroughs. As the New York Works report states, there is

[3] New York Works is a mayoral initiative announced in 2017 that involves a packages of initiative to achieve its job creation goal focusing on jobs that pay at least $50,000 per year or offer a clear path to that salary level.

increased demand for office space outside Manhattan. The City will invest in jobs closer to where New Yorkers live, including in commercial and industrial areas in Brooklyn, Queens, Staten Island, and The Bronx, to improve worker commute times and reduce the burden on transit infrastructure. The new commercial office space facilitated by the Proposed Actions would help meet a borough-wide demand for more commercial office space and locate offices closer to where workers live, consistent with the goals of New York Works.

The Greenpoint neighborhood and the adjacent Williamsburg/Northside neighborhood have experienced significant residential growth since the adoption of the Greenpoint-Williamsburg Rezoning in early 2006. While several new office buildings have been completed or are under construction in the surrounding area in recent years, including the Vice magazine offices, Amazon photo studio and 25 Kent Avenue, the amount of existing office space in the surrounding area has not expanded sufficiently to meet the employment needs of the area's growing residential population, with growing demand for commercial and light industrial space in close proximity to where workers live. The Applicant believes the introduction of an approximately 283,433-gsf (192,000-zsf) building, with approximately 184,561 gsf of commercial space (including office, retail, and restaurant and 32,990 gsf of industrial space facilitated by the Proposed Actions, would provide much needed commercial and industrial space to help address this shortage and increase employment opportunities for the area's growing residential population. In addition, the Applicant believes the proposed inclusion of approximately 47,171 gsf of retail and 13,166 gsf of restaurant space in the Proposed Project would be compatible with the character of the neighborhood, which features a variety of retail and shopping within close proximity to the Development Site. Collectively, the Proposed Actions would provide up to approximately 184,561 gsf of commercial space and 32,990 gsf of industrial space, which would exceed the maximum amount of commercial/industrial floor area that can be constructed as-of-right on the Development Site (i.e., 40,000 zsf) under the existing M1-1 zoning district (i.e., 1.0 FAR), and would thus support the employment needs of the area's growing residential population.

The Proposed Project would also help retain the industrial character of the neighborhood. Historically, this portion of the neighborhood was predominantly comprised of manufacturing, distribution and warehousing uses (such as the historic Hecla Iron Works building approximately 2 blocks southwest of the Development Site). Although recent development in the neighborhood has primarily consisted of conversions and new construction for hotels, retail and entertainment uses, the neighborhood continues to contain a number of industrial spaces and jobs. By leveraging the demand for commercial space, the Proposed Actions would also require the creation of 32,990 gsf of new industrial space, which, unlike under as-of-right (No-Action) conditions, would be protected and could not be converted to office. As noted above, compliance with the Required Industrial Use conditions would be enforced by requirements of the IBIA.

By leveraging the demand for commercial space in Brooklyn, the Applicant believes the requested special permits would encourage the development of a new building with a desirable blend of commercial and light industrial uses, and would further the mission of the Greenpoint-Williamsburg IBZ by strengthening the commercial and manufacturing character of the area.

As described above, the proposed special permit would modify the number of loading berths and parking spaces required for the Proposed Project. The reduction in the required loading berths at the Development Site would reduce the number of curb cuts required for the Proposed Project, which would better activate the surrounding streets and project-generated open space areas, thus improving upon the pedestrian experience at the Development Site. Additionally, as the Development Site is within a transit zone and in close proximity to the Nassau Avenue (G) subway station (approximately 0.3 miles to the

northeast) and the Bedford Avenue (L) subway station (approximately 0.3 miles to the south), the Proposed Actions would encourage and support transit-oriented development within the Development Site in an appropriate area of Brooklyn. Therefore, the Proposed Actions and reduced parking requirement would support the goals of OneNYC in facilitating greater opportunities for transit-oriented growth throughout the city. Further, the Applicant believes that the reduction of parking and loading berth requirements in an area that is well-served by public transit would allow for more efficient use of space on the 40,000-sf Development Site. If the Proposed Project provided the approximately 724 accessory parking spaces and seven loading berths required as-of-right under M1-2 zoning, a large portion of the maximum permitted building envelope would be devoted to accessory parking areas and vertical circulation, and thus would be an inefficient use of space within a transit zone. Additionally, with the onset of the COVID-19 pandemic, the Proposed Actions would further support the growing need to promote livable and walkable mixed-use neighborhoods with work spaces within close proximity to residential communities.

As stated above, the proposed special permit for publicly accessible open space modifications would allow (a) the publicly accessible open space to be located directly across from McCarren Park, (b) the major portion of the publicly accessible open space to front an east-facing street line despite the zoning lot having more than 40 feet of frontage on a south-facing street line, (c) the public entrance to the principal use of the building to be located more than 10 feet from the major portion of the publicly accessible open space, and (d) the building entrance and lobby to occupy less than 20 feet of the frontage of the public plaza. These modifications will allow the publicly accessible open space to be visible from McCarren Park, improving pedestrian circulation and, thus, improving the pedestrian experience at and within the vicinity of the Project Area; the modifications would also allow for retail uses to front on the public plaza, which would encourage public use the public plaza to access those establishments, The Proposed Actions, consisting of a zoning map amendment, zoning text amendment and a special permit, are being requested in order to facilitate the Proposed Project and achieve the objectives discussed above.

V. DESCRIPTION OF THE PROPOSED PROJECT

The Applicant is proposing several actions to facilitate a new mixed-use development on the Applicant-owned Development Site. The Proposed Actions described above will facilitate a new approximately 283,433-gsf commercial and manufacturing development on approximately 40,000 sf of lot area. It is expected that this Proposed Project would include the following components:

- Approximately 184,561 gsf (151,057 zsf) of commercial uses;
- 32,990 gsf (32,000 zsf) of manufacturing/maker space; and
- Approximately 80 below-grade accessory parking spaces.

In compliance with the ZR § 74-963 special permit requirements, the Proposed Project's allocation of zoning floor area among the IBIA use categories would include:

- 184,561 gsf (151,057 zsf) of commercial floor area (3.8 FAR) containing approximately 47,171 gsf of retail space on the first two floors and cellar level (including approximately 23,799 gsf below grade retail), 13,166 gsf of restaurant space on the 10th floor, and 124,224 gsf of office space on the floor and floors three through nine;

- 32,990 gsf (32,000 zsf) of contiguous floor area for Required Industrial Uses (0.8 FAR) on the second and third floors, with 16-to-17-foot slab-to-slab heights, 15-to-16-foot finished ceilings, two passenger elevator banks, a dedicated loading berth, and a dedicated freight elevator.

Collectively, with 4.8 FAR[4] of commercial and manufacturing uses, the proposed building program would not be permitted as-of-right but would comply with the proposed M1-2 district and IBIA designation. The Proposed Project is expected to be completed and occupied by the end of 2025.

Figure A-4 provides a preliminary site plan for the Proposed Project. As shown in this preliminary plan, the entrances to the cellar level and ground floor retail portions of the Proposed Project would be at various locations along the north side of North 12th Street, the west side of Berry Street, the central public plaza and the outer court while the industrial, office and restaurant spaces located on floors 2 through 10 would be accessed through the main lobby via the public passage on the south side of North 13th Street. As shown in **Figure A-5** (the preliminary massing diagram), the Proposed Project would consist of one 10-story building which would have a base height of approximately 46.5 feet after which it would set back 15 feet along North 12th Street, North 13th Street, and Berry Street (each of which are identified as narrow streets) then rise to 135 feet (roof height), complying with the proposed M1-2 zoning district, the requested IBIA designation, and public plaza height bonus.[5] The majority of the building is "L"-shaped, with one leg along the western lot line and the other leg along North 13th Street. A 2-story free-standing retail pavilion (the "Corner Building"), connected to the main building at the cellar level and by a bridge over the public open space, would occupy the corner of North 12th Street and Berry Street.

The approximately 80 proposed self-park spaces would be located below-grade within the sub-cellar level and accessed by a single existing 22-foot-wide curb cut on North 13th Street. Adjacent to the garage entrance would be two loading berths and two freight elevators accessed by a second existing, 22-foot-wide curb cut along the Development Site's North 13th Street frontage. One of the freight elevators would be reserved for the development's industrial uses.

In addition, the Proposed Project would provide approximately 9,690 sf of PAA space (approximately 25% of the Development Site's lot area) that would comprise of two parts: the 4,800 sf central public plaza which qualifies the Proposed Project for a 25-foot building height bonus pursuant to ZR § 74-965(d)(2) (the "Bonused Open Space"); and approximately 4,890 sf of PAA space which does not generate a bonus but would be improved with amenities and available to the public (the "Non-Bonused Open Space"). The approximately 4,800-sf public plaza would front Berry Street along the midblock (approximately 55'6" north of North 12th Street and 74'3" south of North 13th Street) with additional PAA spaces connected to and providing access to the public plaza (refer to **Figure A-4**). Under IBIA regulations, where a publicly accessible open space is provided pursuant to ZR § 74-965(f), the maximum building height may be increased to 135 feet. In order for the Proposed Project to satisfy the conditions of the building height bonus pursuant to ZR § 74-965(d)(2), the Development Site must provide a publicly accessible open space area no less than 12 percent of the Development Site's lot area and at a minimum of 2,000 sf in area pursuant to ZR § 74-965(f) – of which the public plaza portion of the proposed open space satisfies.

[4] The Development Site would maximize the permitted FAR of 4.8 under the IBIA as the Proposed Project would include approximately 3.8 FAR of commercial uses, 0.8 FAR of industrial uses, and 0.2 FAR of parking uses.

[5] Pursuant to ZR § 74-965(d), for developments within Industrial Business Incentive Area 1 that provide a publicly accessible open space pursuant to paragraph (f) of the same ZR section, the maximum building height after initial setback requirements may be increased from 110 feet to 135 feet.

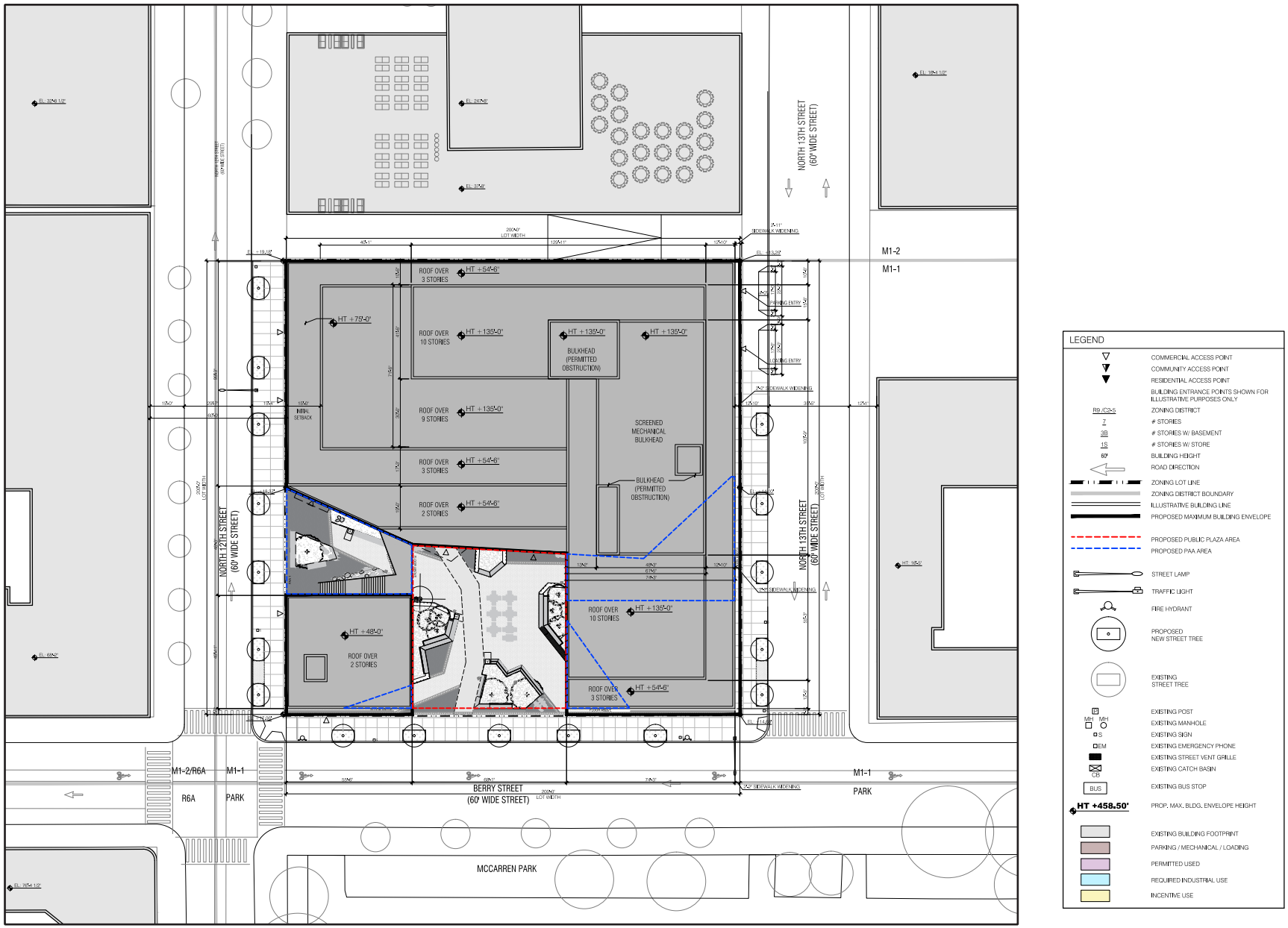


Figure A-4
Preliminary Site Plan (For Illustrative Purposes Only)



20 Berry Street IBIA EAS

Figure A-5
Preliminary Elevations (For Illustrative Purposes Only)

Amenities included in both the public plaza and PAA spaces include bench seating, tables, tree plantings, and landscaped areas.

VI. ANALYSIS FRAMEWORK AND REASONABLE WORST-CASE DEVELOPMENT SCENARIO (RWCDS)

In order to assess the potential effects of the Proposed Actions, a reasonable worst-case development scenario (RWCDS) for both "Future without the Proposed Actions" (No-Action Condition) and "Future with the Proposed Actions" (With-Action condition) will be analyzed for an analysis year, or Build Year, of 2025. The future With-Action scenario identifies the amount, type and location of development that is expected to occur by the end of 2025 as a result of the Proposed Actions. The No-Action scenario identifies development projections for 2025 absent the Proposed Actions. The effect of the Proposed Actions would be the incremental change in conditions between the No-Action and With-Action scenarios. The Proposed Project would be constructed on the Development Site in one continuous phase over approximately 18 months with completion and occupancy in 2025. In accordance with the 2021 *City Environmental Quality Review (CEQR) Technical Manual*, for each technical area, a comparison of the No-Action condition and the With-Action condition provides the basis to determine the potential environmental effects of the Proposed Actions.

Identification of Development Sites/Affected Area

According to the *CEQR Technical Manual*, the following factors, commonly referred to as "soft site criteria," are generally considered when evaluating whether some amount of development would likely be constructed by the Build Year as a result of Proposed Actions:

- The uses and bulk allowed: Lots located in areas where changes in use would be permitted and/or contain buildings built to substantially less than the maximum allowable floor area ratio (FAR) under the existing zoning are considered "soft" enough such that there would likely be sufficient incentive to develop in the future, depending on other factors specific to the area (e.g., the amount and type of recent as-of-right development in the area, recent real estate trends, site specific conditions that make development difficult, and issues relating to site control or site assemblage that may affect redevelopment potential); and

- Size of the development site: Lots must be large enough to be considered "soft." Generally, lots with a small lot size are not considered likely to be redeveloped, even if they are currently built to substantially less than the maximum allowable FAR. A small lot is often defined for this purpose as 5,000 sf or less, but the lot size criteria is dependent on neighborhood-specific trends, and common development sizes in the study area should be examined prior to establishing this criteria.

However, the following uses and types of buildings that meet the soft site criteria are typically excluded from development scenarios because they are unlikely to be redeveloped as a result of Proposed Actions:

- Full block and newly constructed buildings with utility uses, as these uses are often difficult to relocate;

- Lots where construction is actively occurring, or has recently been completed, as well as lots with recent alterations that would have required substantial capital investment, unless recently constructed or altered lots were built to less than or equal to half of the maximum allowable FAR under the proposed zoning;

- Lots whose location or irregular shape would preclude or greatly limit future as-of-right development (generally, development on irregular lots does not produce marketable floor space);

- Long-standing institutional uses with no known development plans; or

- Multi-unit buildings (existing individual buildings with six or more residential units, and assemblages of buildings with a total of 10 or more residential units, are unlikely to be redeveloped because of the required relocation of tenants in rent-stabilized units).

Definition of Projected and Potential Development Sites

To produce a reasonable, conservative estimate of future growth, identified development sites are typically divided into two categories: projected development sites and potential development sites. Projected development sites are considered more likely to be developed within the analysis period for the Proposed Actions (i.e. by 2025), while potential sites are considered less likely to be developed over the same period.

As shown below in **Table A-1**, the Applicant-owned Development Site (Block 2283, Lots 25, 28, 31, 33, 35, 38, 41 and 43) is considered a projected development site, as the Applicant intends to develop the site, as detailed above, with a mixed-use building in the future with the Proposed Actions. No other sites would be affected by the Proposed Actions and therefore there are no other soft sites.

Future without the Proposed Actions (No-Action Condition)

The existing M1-1 zoning district permits a 1.0 FAR for commercial/manufacturing and 2.4 FAR for community facility uses. As all eight lots are built to the full 1.0 FAR, it is assumed that under the No-Action scenario the Development Site would not be redeveloped and all structures would remain.

However, as noted above, the Applicant and property owner (Mihata Corp.) is the sole occupant at the Development Site. The Applicant currently occupies two of the eight buildings while the other six are currently unoccupied. Based on real estate trends in the area, in the future without the Proposed Actions it is assumed that the Applicant would convert the six unoccupied buildings to retail uses and more aggressively pursue additional occupants. As such, in the No-Action condition the site would be fully tenanted with approximately 10,000 gsf (10,000 zsf) of warehouse/light industrial uses similar to those required under the proposed IBIA designation, although they would not be protected, and 30,000 gsf (30,000 zsf) of local retail uses.

Future with the Proposed Actions (With-Action Condition)

In the future with the Proposed Actions (the With-Action condition), the proposed zoning map amendment, zoning text amendment, and special permit would be implemented in the Development Site. As such, the Development Site would be remapped as an M1-2 district and would be included in the Industrial Business Incentive Area ("IBIA"). Under the With-Action conditions, the maximum allowable

FAR in the Development Site would increase to 4.8 when fully utilizing the additional FAR under the IBIA program.

As detailed in **Table A-2** below, under the With-Action RWCDS, the Development Site would be redeveloped with a 10-story, approximately 283,433-gsf (191,099-zsf) commercial and light industrial development with a built FAR of 4.8. The With-Action building would have a base height of approximately 46 feet, a 15-foot setback, and a roof height of 135 feet (pursuant to a public plaza height bonus). Approximately 47,171 gsf of retail space (including 23,799 gsf below grade), 124,224 gsf of office space, and 13,166 gsf of restaurant space would comprise the approximately 184,561 gsf (151,057 zsf) of commercial uses while approximately 32,990 gsf (32,000 zsf) would be reserved for the required industrial uses. Approximately 9,690-sf of the ground floor would be occupied by PAA space, of which would include a 4,800-sf public plaza which qualifies the Proposed Project for a 25-foot building height bonus pursuant to ZR § 74-965(d)(2) (the "Bonused Open Space"); and approximately 4,890 sf of PAA space which does not generate a bonus but would be improved with amenities and available to the public (the "Non-Bonused Open Space"). The 4,900-sf public plaza would front on Berry Street, and the remaining 4,890-sf of PAA space would flank the proposed public plaza, with frontages along Berry Street, North 12th Street, and North 13th Street for a total of 9,690-sf of publicly accessible open space. Approximately 65,882 gsf of parking and mechanical space would be contained within portions of the ground floor, cellar, and sub-cellar levels, and all 80 self-parking spaces would be located on the sub-cellar level. Two loading berths would be provided along the North 13th Street frontage, adjacent to the vehicular ramp to the below-grade parking. One loading berth would measure approximately 50 feet in length, while the other would measure approximately 33 feet in length. Both loading berths would be accessed by an existing 22-foot-wide curb cut approximately 150 feet north of Berry Street. The below-grade parking would be accessed by a second existing 22-foot-wide curb cut located approximately 3'9" feet north of the loading curb cut.

TABLE A-2: With-Action Scenario – Total RWCDS at the Development Site

Lots	Lot Area (sf)	Max. FAR	Industrial SF	Commercial SF	Parking SF	Total Building SF[1]	Parking Spaces	Max. Building Height	PAA Space SF
25, 28, 31, 33, 35, 38, 41, 43	40,000	4.8	32,990 gsf (32,000 zsf)	184,561 gsf (151,057 zsf)	65,882 gsf (8,042 zsf)	283,433 gsf (191,099 zsf)	80	135'	9,690 sf

Note: [1]Total GSF includes below-grade parking garage

The Proposed Project would be built and occupied in accordance with the IBIA special permit and applicable zoning bulk regulations and would be designed to meet the site design, envelope, and urban design requirements that would be applicable to developments making use of the special permit. The Applicant's Proposed Project would maximize the permitted buildable floor area available on the Development Site under the proposed M1-2 zoning district, the proposed IBIA designation and related special permits as described above. As such, the Proposed Project represents the RWCDS With-Action scenario as it would maximize the buildable floor area with a built FAR of 4.80 and a roof height of 135 feet, complying with the proposed M1-2 zoning district, the requested IBIA designation and special permits, and the public plaza height bonus pursuant to ZR § 74-965(d)(2).

Reasonable Worst-Case Development Scenario for Analysis Purposes

As summarized in **Table A-3**, compared to future conditions without the Proposed Actions, the RWCDS anticipates that the Proposed Actions would result in a net increase of 22,990 gsf of light industrial space, 124,224 gsf of commercial office space, 17,171 gsf of commercial retail space, and 13,166 gsf of restaurant

space, as well as the net increase of 9,690 sf of PAA space (of which includes 4,800 sf of public plaza, "Bonused Open Space," and 4,890 sf of "Non-Bonused Open Space") and 80 parking spaces. Based on the employee generation rates outlined in the EAS Form, the Proposed Actions would result in the net increase of 614 employees as compared to the No-Action condition. This net increment will represent the basis for environmental analyses in the EAS.

Table A-3: Comparison of 2025 No-Action and With-Action Scenarios

Use	No-Action	With-Action	Net Increment
Light Industrial gsf	10,000	32,990	+22,990
Commercial gsf	30,000	184,561	+154,561
Office gsf	--	124,224	+124,224
Retail gsf	30,000	47,171	+17,171
Restaurant gsf	--	13,166	+13,166
Accessory Parking	-- (0 spaces)	65,882 (80 Spaces)	+65,882 (+80 spaces)
TOTAL	***40,000***	***283,433***	***+243,433***
Open Space (PAA) sf	--	9,690	+9,690
"Bonused Open Space" (Public Plaza) sf	--	4,800	+4,800
"Non-Bonused Open Space" sf	--	4,890	+4,890
Employees[1]	100	714	+614

Note: [1]See "Description of Existing and Proposed Conditions" table in the EAS Form for employee generation rates

ATTACHMENT B

SUPPLEMENTAL SCREENING

I. INTRODUCTION

This environmental assessment statement ("EAS") has been prepared in accordance with the guidelines and methodologies presented in the 2020 *City Environmental Quality Review (CEQR) Technical Manual*. For each technical area, thresholds are defined, which if met or exceeded, require that a detailed technical analysis be undertaken. Using these guidelines, preliminary screening assessments were conducted for the Proposed Actions in all CEQR analysis categories to determine whether detailed analysis of any technical area was appropriate. Part II of the EAS Form identified those technical areas that warrant additional assessment. For those technical areas that warranted a "Yes" answer in Part II of the EAS Form, including Land Use, Zoning, and Public Policy; Open Space; Shadows; Historic and Cultural Resources; Urban Design and Visual Resources; Hazardous Materials; Water and Sewer Infrastructure; Transportation; Air Quality; Noise; Public Health; Neighborhood Character; and Construction, supplemental screening assessments are provided in this attachment.

Per the screening assessments provided in this attachment, further analyses of Land Use, Zoning, and Public Policy; Open Space; Shadows; Urban Design and Visual Resources; Water and Sewer Infrastructure; Transportation; Air Quality; and Noise are warranted and are provided in Attachments C through J, respectively.

Conversely, for the other technical areas, based on "No" answers on Part II of the EAS Form, analysis is not warranted since these areas either do not trigger initial CEQR thresholds and therefore are unlikely to result in significant adverse impacts. These areas screened out from any further assessment include: Socioeconomic Conditions; Community Facilities; Natural Resources; Solid Waste and Sanitation Services; Energy; and Greenhouse Gas Emissions. **Table B-1** presents a summary of analysis screening information for the Proposed Actions.

As described in **Attachment A, "Project Description,"** the Proposed Actions consist of a series of discretionary approvals necessary to facilitate the Proposed Project, including:

- A zoning map amendment to rezone the Development Site (Block 2283, Lots 25, 28, 31, 33, 35, 38, 41 and 43) from M1-1 to M1-2;
- A zoning text amendment to Zoning Resolution Section (ZR §) 74-968, affecting the eastern part of Block 2283 to a depth of 200 feet measured from Berry Street (encompassing the entire Development Site), designating this area an Industrial Business Incentive Area (IBIA);
- A special permit pursuant to ZR § 74-963 et seq to increase the maximum permitted commercial and industrial floor area ratio (FAR) from 2.0 to approximately 4.8 FAR in a M1-2 district[1] to incentivize industrial uses on the Development Site;

[1] For M1-2 districts absent IBIA regulations, only community facility uses are permitted a maximum FAR of 4.8, whereas the maximum permitted FAR for commercial and industrial uses is 2.0.

- A special permit pursuant to ZR § 74-964(b) to (i) modify provisions set forth in ZR § 37-713 to allow PAA space to be located directly across from McCarren Park, (ii) modify the provisions set forth in ZR § 37-714(b) to allow the major portion of the PAA space to front on an east-facing street line, and (iii) modify the provisions set forth in ZR § 37-76(b) to allow the entrance to the principal use of the Proposed Project to be located more than 10 feet from the major portion of the PAA space and to allow the building's entrance and lobby to occupy less than 20 feet of the frontage of the PAA space;
- A special permit pursuant to ZR § 74-964(c) to modify the accessory off-street parking requirement at the Development Site to be reduced from 724 (as required by ZR § 44-21) to 80 spaces, and to modify the loading berth requirement at the Development Site to be reduced from seven berths (as required by ZR § 44-52) to two.
- By designating the Development Site as an IBIA, the Zoning Text Amendment would make the IBIA special permit pursuant to ZR § 74-962 available to the Development Site. As such, the Proposed Project would provide up to approximately 32,990 gsf (32,000 zoning square feet [zsf]) of Required Industrial Uses (0.8 FAR) and up to approximately 83,630 gsf (80,000 zsf) of Incentive Uses (2.0 FAR)[2] to occupy floor area beyond that permitted by the proposed M1-2 district use limitations at the Development Site (see below for more info on IBIA regulations).

These approvals would facilitate the development of a ten-story, 135-foot tall (roof height), commercial and manufacturing building with approximately 283,433 gross square feet (gsf) (192,000 zoning square feet [zsf]), including 184,561 gsf (151,057 zsf) of commercial space (3.80 FAR), 32,990 gsf (32,000 zsf) of manufacturing uses (0.80 FAR), and 65,882 (8,042 zsf) of accessory off-street parking uses and mechanical space (0.20 FAR), with a total built FAR of 4.8 (the "Proposed Project"). The commercial uses of the proposed 10-story building would include: approximately 47,171 gsf (20,488 zsf) of retail space (0.51 FAR) on the first two floors and cellar level (approximately 23,799 gsf would be below grade), approximately 124,224 gsf (118,051 zsf) of office space (2.97 FAR) on the ground floor and floors three through nine (approximately 3,065 gsf would be on the ground floor), and 13,166 gsf (12,518 zsf) of restaurant space (0.31 FAR) on the tenth floor. The manufacturing uses (industrial uses and maker spaces required under the IBIA) would be located on the second and third floors with a dedicated freight elevator connecting to the ground floor loading berths. An approximately 9,690-sf public accessible open space ("PAA space") would front Berry Street with two auxiliary access points on North 12th and North 13th Streets. The PAA space would be comprised of a 4,800-sf public plaza within the central portion of the PAA space which qualifies the Proposed Project for a 25-foot building height bonus, whereas the remainder of the open space would comprise of 4,890-sf of general PAA space (which does not generate a bonus but will be improved with amenities and available to the public).[3] in addition, approximately 65,882 gsf (8,042 zsf) of self-parking and mechanical space (0.20 FAR) would be located on the ground floor and in the cellar and sub-cellar levels. Access and egress to the proposed 80 accessory off-street parking spaces would be provided by a single existing, approximately 22-foot curb cut on North 13th Street approximately 175 feet

[2] It should be noted that while the provision of 80,000 zsf (2.0 FAR) of Incentive Uses would satisfy the IBIA requirement for commercial uses, a greater amount of commercial space is being proposed, including approximately 47,171 gsf (20,488 zsf) of retail space (0.51 FAR), 124,224 gsf (118,051 zsf) of office space (2.97 FAR), and 13,166 gsf (12,518 zsf) of restaurant space (0.31 FAR), for a total of 184,561 gsf (151,057 zsf) of commercial floor area (3.80 FAR).

[3] As described in Attachment A, "Project Description," under IBIA regulations, where a publicly accessible open space is provided pursuant to ZR § 74-965(f), the maximum building height may be increased to 135 feet. In order for the Proposed Project to satisfy the conditions of the building height bonus pursuant to ZR § 74-965(d)(2), the Development Site must provide a publicly accessible open space area no less than 12 percent of the Development Site's lot area and at a minimum of 2,000 sf in area pursuant to ZR § 74-965(f) – of which the public plaza portion of the proposed open space satisfies.

north of Berry Street. The Proposed Project's two loading berths would be accessed by another existing, 22-foot-wide curb cut along North 13th Street approximately 150 feet north of Berry Street. The Proposed Project would be constructed at 20 Berry Street (the "Development Site"), a 40,000-sf square lot located on the eastern portion of the block generally bound by North 13th Street, Berry Street, North 12th Street, and Wythe Avenue in Brooklyn.

The existing M1-1 zoning district permits a 1.0 FAR for commercial/manufacturing and 2.4 FAR for community facility uses, and all eight lots are built to the full 1.0 FAR. Therefore, in the future without the Proposed Actions, it is anticipated that the Development Site would not be redeveloped and all structures would remain in their existing condition. The Applicant and property owner is the sole occupant at the Development Site, and it is assumed that the Applicant would pursue additional occupants so the site would be fully tenanted with light industrial uses similar to those in the surrounding neighborhood The Proposed Project would be completed by 2025, which is the analysis year used for in this EAS.

Table B-1: Summary of CEQR Technical Areas Screening

***CEQR* TECHNICAL AREA**	**SCREENED OUT PER EAS FORM**	**SCREENED OUT PER SUPPLEMENTAL SCREENING**	**FURTHER ASSESSMENT REQUIRED**
Land Use, Zoning, & Public Policy			X
Socioeconomic Conditions	X		
Community Facilities	X		
Open Space			X
Shadows			X
Historic & Cultural Resources		X	
Urban Design & Visual Resources			X
Natural Resources	X		
Hazardous Materials		X	
Water & Sewer Infrastructure			X
Solid Waste & Sanitation Services	X		
Energy	X		
Transportation - Traffic & Parking - Transit - Pedestrians			 X X X
Air Quality - Mobile Sources - Stationary Sources			 X X
Greenhouse Gas Emissions	X		
Noise			X
Public Health		X	
Neighborhood Character		X	
Construction		X	

Under With-Action conditions, the incremental change in land use would be as follows: +22,990 gsf of light industrial use; +124,224 gsf of office space; +17,171 gsf of retail space; +13,166 gsf of restaurant space; +4,800 gsf of public plaza; +80 parking spaces; +243,433 gsf of total building area; and +112.4 feet of additional building height (+9 stories). The net incremental difference between the With-Action and No-Action scenarios serves as the basis for the environmental impact analyses

II. SUPPLEMENTAL SCREENING AND SUMMARY OF DETAILED ANALYSES

Land Use, Zoning, and Public Policy

Following 2021 *CEQR Technical Manual* guidelines, a preliminary assessment, which includes a basic description of existing and future land uses and zoning, should be provided for all projects that would affect land use or would change the zoning on a site, regardless of the project's anticipated effects. CEQR also requires a detailed assessment of land use conditions if a detailed assessment has been deemed appropriate for other technical areas. Furthermore, if, as in the case of the Proposed Actions, there are public policies applicable to the Proposed Project, including the Waterfront Revitalization Program (WRP), then consistency assessments should be provided. Accordingly, an assessment of land use, zoning, and public policy is provided in **Attachment C, "Land Use, Zoning and Public Policy."** As discussed therein, the Proposed Actions would not result in any significant adverse land use, zoning, or public policy impacts.

Open Space

An open space assessment may be necessary if a proposed action could potentially have a direct or indirect effect on open space resources within or in the vicinity of the Project area. A direct effect would "physically change, diminish, or eliminate an open space or reduce its utilization or aesthetic value." An indirect effect may occur when the population generated by a proposed action would be sufficient to noticeably diminish the ability of an area's open space to serve the existing or future population. Typically, an assessment is warranted if a proposed action would generate more than 200 residents or 500 employees, or a similar number of other uses, to an area.

The Proposed Actions would not have any direct effect on open space, as there are no publicly accessible open spaces at the Development Site. Therefore, an analysis of direct impacts on existing open space in the Development Site is not warranted; however, based on other EAS attachments, this assessment will summarize the findings of potential direct effects on open space related to shadows, noise, and construction. The Proposed Actions would generate a net 614 employees at the Development Site, and therefore, would require further assessment of the potential for non-residential indirect open space impacts pursuant to 2021 *CEQR Technical Manual* guidance.

As indicated in **Attachment D, "Open Space,"** while the non-residential (0.25-mile) study area's passive open space ratio would decrease by more than five percent (a 8.51 percent reduction) in the future with the Proposed Actions as compared to No-Action conditions, the passive open space ratio would remain well above the City's planning guideline of 0.15 acres per 1,000 non-residents, at 2.15 acres per 1,000 non-residents. In addition, the Project Area is located within a Walk to a Park Service Area and, therefore, is not located within a walk gap area (i.e., an area of the City that is not within a walking distance to a park). As such, workers in the 0.25-mile study area would continue to have access to passive open space resources, and there would be no significant adverse impact on open space in the defined study area as a result of the Proposed Actions. Furthermore, although the Proposed Project would increase the demand for passive open space for the daytime population in the study area, that demand could be partially absorbed by the 0.22-acre PAA space that would be provided on the Development Site in the future with the Proposed Action, as well as the roof terraces proposed as part of the project. Therefore, the Proposed Actions would not result in any significant adverse indirect impacts to study area open space resources.

Shadows

A shadows assessment considers actions that result in new shadows long enough to reach a publicly accessible open space, natural resource, or historic resource (expect within an hour and a half of sunrise or sunset). For actions resulting in structures less than 50 feet high, a shadow assessment is generally not necessary unless the site is adjacent to a park, historic resource, or important natural feature (if the features that make the structure significant depend on sunlight).

The Proposed Actions would result in the construction of a new development with a maximum height of approximately 135 feet (roof height). As shown in **Attachment E, "Shadows,"** the Proposed Actions would result in incremental shadow coverage (i.e. additional, or new, shadow coverage) on a single open space resource (i.e., McCarren Park). Project-generated shadows would not affect the utilization, enjoyment, or character of this sunlight-sensitive resource and all vegetation would continue to receive a minimum of six to eight hours of direct sunlight throughout the growing season. Therefore, the Proposed Actions would not result in any significant adverse shadows impacts.

Historic and Cultural Resources

Historic and cultural resources include both architectural and archaeological resources. *The CEQR Technical Manual* identifies historic and cultural resources as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. This includes designated New York City Landmarks (NYCL); properties calendared for consideration as landmarks by the New York City Landmarks Preservation Commission (LPC); properties listed on the State/National Registers of Historic Places (S/NR) or contained within a district listed in or formally determined eligible for S/NR listing; properties recommended by the New York State Board for listing on the S/NR; National Historic Landmarks; and properties not identified by one of the programs listed above, but that meet their eligibility requirements. An assessment of historic/archaeological resources is usually needed for projects that involve or are located adjacent to historic or landmark structures or within historic districts, or projects that require in-ground disturbance, unless such disturbance occurs in an area that has already been excavated.

Archaeological Resources

Archaeological resources are considered only in those areas where new excavation or ground disturbance is likely and would result in new in-ground disturbance as compared to No-Action conditions; these are limited to sites that may be developed as a result of the Proposed Actions. In a letter dated October 24, 2022 (provided in **Appendix III**), LPC concluded that none of the lots comprising the Development Site have archaeological significance. Therefore, the Proposed Actions would not have the potential to result in any significant adverse archaeological impacts.

Architectural Resources

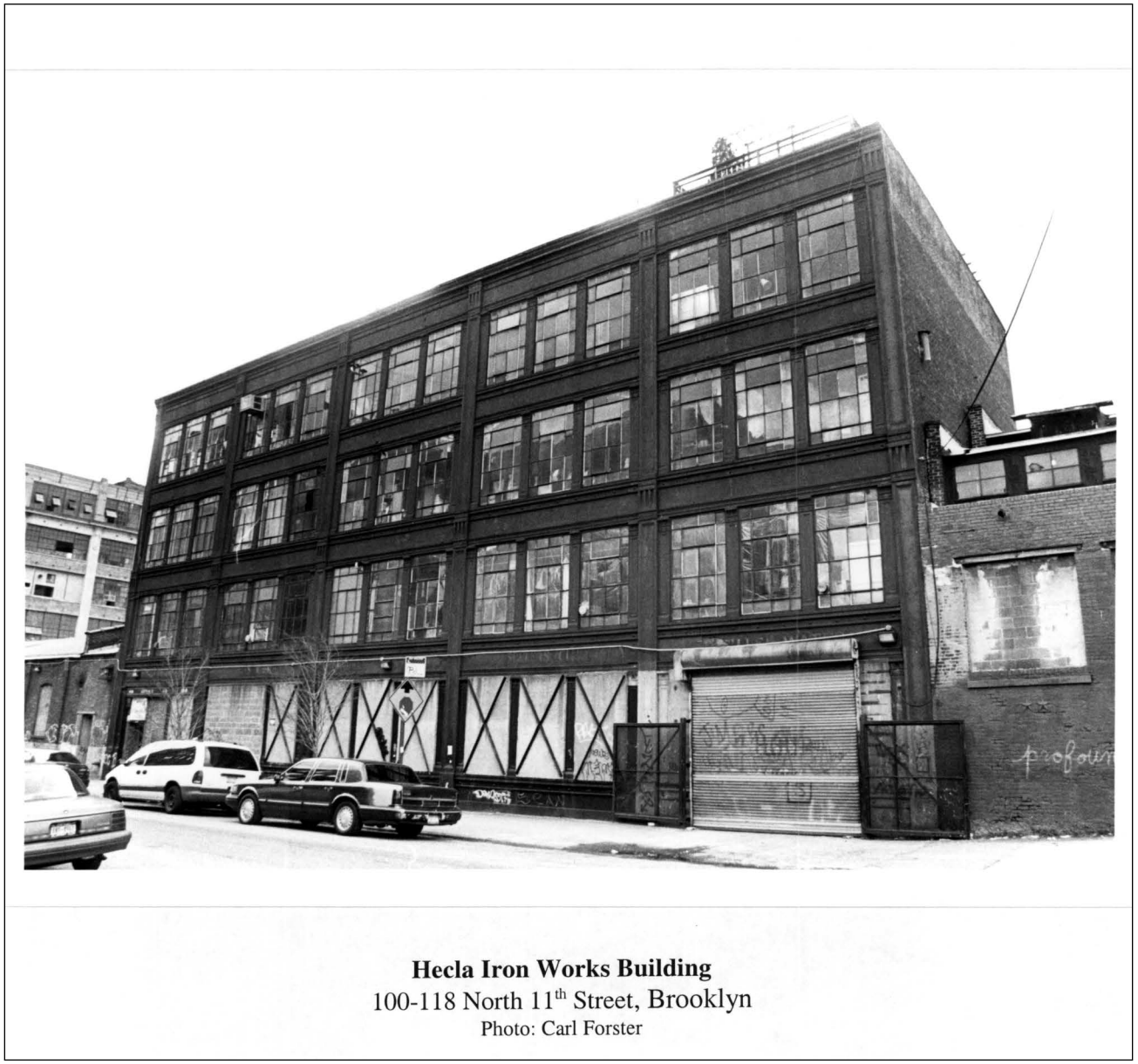
LPC also determined that the Development Site does not contain any designated or eligible historic architectural resources (refer to correspondence in **Appendix III**). However, as illustrated in **Figure B-1**, the Development Site is located within 400 feet of the LPC-designated and S/NR-eligible Hecla Iron Works building at 100-118 North 11th Street. Therefore, per 2021 *CEQR Technical Manual* guidance, it is necessary to assess the potential impacts of the Proposed Actions on historic architectural resources.

Hecla Iron Works (LPC-Designated & S/NR-Eligible)

Located to the southwest of the Development Site, the Hecla Iron Works building was built by one of the most important manufacturers of architectural and ornamental iron and bronze in the United States. The Hecla Iron Works company was co-founded by Niels Poulson and Charles Eger in 1876, and the four-story structure was built in 1896-97 to serve as the company's headquarters and as a showpiece for the types of architectural and ornamental work that Hecla Iron Works produced, with a cast-iron façade containing simple classical details that were fabricated on site and treated with the Bower-Barff process to protect corrosion. The Bower-Barff process, patented by Frederick Settle Barff in 1876 and modified by George Bower in 1881, is a metal treatment process that exposes iron to super-heated steam which converts rust to magnetite, making the iron hard and unaffected by moisture. This process would create black velvety metal surface, and components treated this way required no painting and were left remarkably well-preserved. While most iron fronts incorporate rows of weight-bearing columns, the Hecla Iron Works building's facades were only a few inches thick, suggestive of skin rather than structure. In combination with the metal frame windows, which are all original to the building, the Hecla Iron Works building and its utilization of the Bower-Barff process anticipates the decline of masonry fronts and the rise of the modern curtain wall.

Hecla's contribution to New York City's built fabric was extremely significant. Named for an active volcano in Iceland, this versatile firm supplied ornamental work for the exteriors and interiors of many LPC-designated landmarks, including the American Surety Building (100 Broadway, Manhattan), New York Life Insurance Company Building (346 Broadway, Manhattan), B. Altman & Co. Department Store (355-371 Fifth Avenue, 188-198 Madison Avenue, Manhattan), and Grand Central Terminal. Hecla also produced the 133 original kiosks for the IRT subway system. After the deaths of Poulson and Eger, the works closed and the building was sold in 1928 to the Carl H. Schultz Mineral Water Company; since 1989, the lofts have been leased to commercial and residential tenants.

Located on the south side of North 11th Street, between Berry Street and Wythe Avenue, the four-story building's northern façade facing North 11th Street is faced with cast iron (see **Figure B-2**). The plates have a black patina and simple classical ornamentation, including moldings, metopes, and rosettes. Pilasters divide the façade info five bays. Within each bay are three sets of windows. The fenestration, which is original to the building, is arranged in a grid-like pattern. While the other panes are fixed, the central panels pivot vertically, and the wide panel, directly above, pivots horizontally. The bays on the ground floor have been significantly altered: from east to west, the first bay has been filled with brick and incorporates a black metal entrance door, the second with grey concrete block and a single concrete plate, the third and fourth with three concrete plates, and the fifth, with a roll-down silver metal garage door, flanked by black iron gates. The concrete plates are located above the original metal based and each has a steel cross brace. Between the first- and second-story, non-historic lighting fixtures and aluminum piping, faded whitish lettering is visible, reading from east to west: "AMERICAN BEVERAGE CORP. CARL H. SCHULZ SPARKLING BEVERAGES, etc. The east façade (facing Berry Street) is visible above the roof of the adjoining one-story building (directly east of the Hecla Iron Works building) and the west façade (facing Wythe Avenue) is visible above the neighboring two story building (directly to the west). Both walls are faced with red brick. The east wall has a pipe that runs down the center of the façade and two windows: the third-story window is sealed with concrete block and the fourth-story window, which may be original, has six panes and pivots outward. The west wall has no windows. At either end of the roof concrete bulkheads are visible, as well as non-historic wood terrace structures. The south façade (facing North 10th Street) is faced in iron above the second story and is not visible from the streetlevel.



Hecla Iron Works Building
100-118 North 11th Street, Brooklyn
Photo: Carl Forster

Source: NYC Landmarks Preservation Commission

Hecla Iron Works Building Photos



Hecla Iron Works Building
Photo: Carl Forster

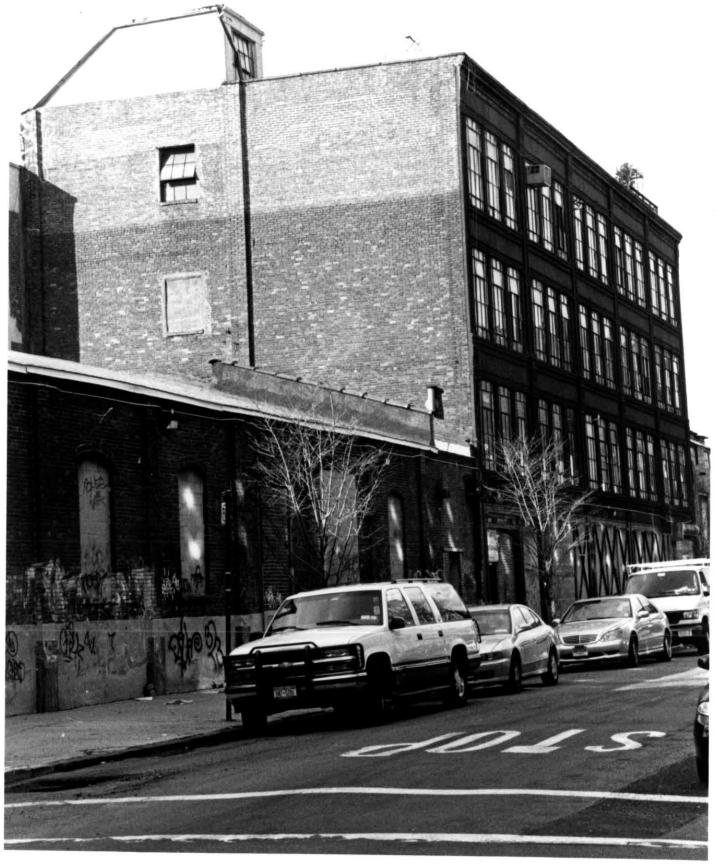


Hecla Iron Works Building
first story, east end
Photo: Carl Forster

Source: NYC Landmarks Preservation Commission



Hecla Iron Works Building
windows and pilasters
Photo: Carl Forster



Hecla Iron Works Building
east facade
Photo: Carl Forster

Source: NYC Landmarks Preservation Commission

Assessment

According to the *CEQR Technical Manual*, generally, if a proposed action would affect those characteristics that make a resource eligible for LPC designation or S/NR listing, this could be a significant adverse impact. The Proposed Actions were assessed in accordance with methodologies established in the 2021 *CEQR Technical Manual* (Chapter 9, Part 420) to determine (i) whether there would be a physical change to any designated or listed property as a result of the Proposed Actions; (ii) whether there would be a physical change to the setting of any designated resource, such as context or visual prominence, as a result of the Proposed Actions; and (iii) if so, whether the change is likely to diminish the qualities of the resource(s) that make it important.

Direct (Physical) Impacts

Historic resources can be directly affected by physical destruction, demolition, damage, alteration, or neglect of all or part of a historic resource. However, the Proposed Actions are site-specific, and, as discussed above, the Development Site does not contain any designated or eligible historic resources. Therefore, the Proposed Actions would not result in any direct impacts to historic architectural resources.

Indirect (Contextual) Impacts

According to the *CEQR Technical Manual*, possible contextual impacts to architectural resources may include isolation of the property from, or alteration of, its setting or visual relationships with the streetscape. This includes changes to the resource's visual prominence so that it no longer conforms to the streetscape in terms of height, footprint, or setback; is no longer part of an open setting; or can no longer be seen as part of a significant view corridor. Significant indirect impacts can occur if a project would cause a change in the quality of a property that qualifies it for listing on the S/NR or LPC designation.

The Proposed Actions would not result in significant adverse indirect impacts on historic architectural resources. The Proposed Project would not significantly alter the context or setting of the Hecla Iron Works building as compared to No-Action conditions. As detailed above, the Proposed Actions would facilitate the development of a 10-story mixed-use commercial and industrial building on the Development Site. The Hecla Iron Works building is currently not visible from the Development Site and the development of the Proposed Project would not affect existing views of the historic building from the streetlevel. The study area is a dense urban environment with multiple existing mid-rise buildings that currently block any views beyond the streets bounding the block in which the Hecla Iron Works building is located. The Proposed Development would not substantially change the visual setting of the Hecla Iron Works building so as to affect those characteristics that make it eligible for LPC-designation or S/NR-eligibility.

Additionally, in the future with the Proposed Actions, no incompatible visual, audible, or atmospheric elements would be introduced to any historic resource's setting. The Proposed Project would not alter the relationship of any identified historic architectural resources to the streetscape, as all streets in the study area would remain open and all historic resources' relationships to the street would remain unchanged in the future with the Proposed Actions. The Proposed Project would not eliminate or screen public views of any historic architectural resources, which would remain visible in view corridors on adjacent public streets and sidewalks. No primary facades, significant architectural ornamentation, or notable features of the Hecla Iron Works building would be obstructed by the Proposed Project.

The Proposed Actions would not result in development that would diminish the qualities that make the LPC-designated and S/NR-eligible Hecla Iron Works landmarked building historically and architecturally significant. As such, the Proposed Actions would not result in any significant adverse indirect or contextual impacts on historic architectural resources.

Construction-Related Impacts

Any new construction taking place within historic districts or adjacent to individual landmarks has the potential to cause damage to those historic resources from ground-borne construction vibrations. However, as there are no historic architectural resources located within 90 feet of the Development Site (see **Figure B-1**), the Proposed Actions would not have the potential to result in any significant adverse construction-related impacts to historic resources.

Shadows Impacts

The Proposed Actions would not result in any significant adverse shadows impacts on historic resources. As detailed in **Attachment E**, "Shadows," based on the preliminary shadow screening, no historic resources containing sunlight-sensitive features were identified within the Tier 1 and Tier 2 shadow study area. Therefore, project-generated shadows are not expected to affect any historic resources, and would thus not result in any significant adverse shadow impacts on historic resources.

Urban Design and Visual Resources

An area's urban design components and visual resources together define the look and character of the neighborhood. The urban design characteristics of the neighborhood encompass the various components of buildings and streets in the area, including building bulk, use, and type; building arrangement; block form and street pattern; streetscape elements; street hierarchy; and natural features. An area's visual resources are its unique or important public view corridors, vistas, or natural or built features. For CEQR analysis purposes, this includes only views from public and publicly accessible locations and does not include private residences or places of business.

An analysis of urban design and visual resources is appropriate if a Proposed Actions would (a) result in buildings that have substantially different height, bulk, form, setbacks, size, scale, use, or arrangement than exists in an area; (b) change block form, de-map an active street or map a new street, or affect the street hierarchy, street wall, curb cuts, pedestrian activity or streetscape elements; or (c) would result in above-ground development in an area that includes significant visual resources.

As the Proposed Actions involve special permits that would apply special contextual bulk regulations to the Development Site, resulting in building envelope under With-Action conditions that would not permitted as-of-right under No-Action conditions, an analysis of the potential impacts of the Proposed Actions on urban design is warranted and is provided in **Attachment F, "Urban Design and Visual Resources."** As discussed therein the Proposed Actions would not result in significant adverse impacts to urban design or visual resources on the development site or within the 400-foot study area.

Water & Sewer Infrastructure

As detailed in **Attachment G, "Water & Sewer Infrastructure,"** an assessment of water and sewer infrastructure determined that the Proposed Actions would not result in significant adverse impacts on the City's water supply or wastewater and stormwater conveyance and treatment.

Water Supply

The Proposed Project would generate an incremental water demand of approximately 51,450 gpd (including water related to sanitary and domestic uses) compared with the No-Action condition. While this would represent an increase in demand on the New York City water supply system, it does not meet the *CEQR Technical Manual* threshold requiring a detailed analysis (i.e., the Proposed Actions would not result in (i) water pressure of less than 30 lbs per square inch in the localized water main network; and (ii) water demand that would not be met by existing water supply infrastructure or require upgrades to the existing system). Therefore, an analysis of water supply is not warranted as it is expected that there would be adequate water service to meet the incremental water demand from the Proposed Project and there would be no significant adverse impacts on the City's water supply.

Wastewater and Stormwater Conveyance and Treatment

Based on preliminary assessment, it was determined that the Proposed Actions would not result in significant adverse impacts on wastewater treatment or stormwater conveyance infrastructure. The Proposed Project is expected to generate approximately 34,477 gallons per day (gpd) of sanitary sewage, an increase of approximately 24,981 gpd compared to No-Action conditions. This incremental increase in sewage generation is less than 0.01 percent of the average daily flow at the Newtown Creek Water Pollution Control Plant (WPCP) and would not result in an exceedance of the plant's permitted capacity of 310 million gallons per day (mgd). Therefore, the Proposed Actions would not result in a significant adverse impact to the City's sanitary sewage conveyance and treatment system.

Depending on the rainfall volume and duration, the total With-Action volume to the combined sewer system could be between 0.01 and 0.09 mg. Compared to the No-Action condition, this would represent an increase in combined sewer flows of up to 0.02 mg, depending on rainfall intensities. With the incorporation of selected stormwater source control best management practices (BMPs) that would be required as part of the site connection approval process, subject to the review and approval of DEP, the peak stormwater runoff rates would be reduced. Overall, the Proposed Project would not result in significant adverse impacts on the City's sewage conveyance and treatment systems.

Hazardous Materials

According to the *CEQR Technical Manual,* a hazardous material is any substance that poses a threat to human health or the environment. Substances that can be of concern include, but are not limited to, heavy metals, volatile and semi-volatile organic compounds, methane, polychlorinated biphenyls, and hazardous wastes (defined as substances that are chemically reactive, ignitable, corrosive, or toxic. Per *CEQR Technical Manual* guidance, the potential for significant adverse impacts from hazardous materials

can occur when: (a) hazardous materials exist on a site and (b) an action would increase pathways to their exposure; or (c) an action would introduce new activities or processes using hazardous materials.

In February 2019, New York State Department of Environmental Conservation (NYSDEC) released a Record of Decision (ROD) for State Superfund Site No. 224069 (i.e., the Development Site and the adjacent property (Lot 1)). As part of this process, the Division of Environmental Remediation (DER) at NYSDEC conducted a Remedial Investigation (RI) to define the nature and extent of any contamination resulting from previous activities at the site (refer to **Appendix I**).

The ROD identifies the Development Site, as well as the adjacent lot, as the former site of the Wythe Avenue Station – a manufactured gas plant (MGP). This report, the conclusions and recommendations of which are provided in **Appendix I**, concludes that the Development Site's subsurface soil consists of non-native historic fill material containing volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs) above Unrestricted Use, Restricted Residential, and/or Commercial Use site cleanup objectives (SCOs). VOCs, SVOCs, and lead were also reported in groundwater samples within the Development Site and at the site boundary. In addition, sub-slab soil vapor samples contained petroleum-related VOCs and the chlorinated volatile organic compound (VOC) trichloroethylene (TCE), which is not associated with former gas holder operations.

As disposal of hazardous wastes at the site has resulted in threats to public health and the environment, the NYSDEC, in consultation with the New York State Department of Health (NYSDOH), selected a remedy for the site which was established through the remedy selection process stated in 6 NYCRR Part 375. As detailed in Section 7: "Summary of the Selected Remedy" of the ROD provided in **Appendix I**, the elements of the selected remedy are as follows:

- 1) A site cover (building) currently exists and will be maintained to allow for restricted residential use of the site. Any future site redevelopment will maintain the existing site cover, which consists either of the structures such as buildings, pavement, and sidewalks, or soil where the upper two feet of exposed surface soil meets the applicable soil cleanup objectives (SCOs) for restricted residential use. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6NYCRR part 375-6.7(d).

- 2) Imposition of an institutional control in the form of an environmental easement for the controlled property which will:

    - Require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);

    - Allow the use and development of the controlled property for restricted residential use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;

    - Restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or NYCDOH; and

    - Require compliance with the Department-approved Site Management Plan.

- 3) A Site Management Plan (SMP) is required, which includes the following:

- A) An Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

    - Institutional Controls: The Environmental Easement discussed in Paragraph 2 above.

    - Engineering Controls: The site cover discussed in Paragraph 1.

- This plan includes, but may not be limited to:

    - An Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;

    - A provision for future investigation and remediation should large scale redevelopment occur, if any of the existing structures are demolished, or if the subsurface is otherwise made accessible. The nature and extent of contamination in areas where access was previously limited or unavailable will be immediately and thoroughly investigated pursuant to a plan approved by the Department. Based on the investigation results and the Department determination of the need for a remedy, a Remedial Action Work Plan (RAWP) will be developed for the final remedy for the site, including removal and/or treatment of any source areas to the extent feasible. Citizen Participation Plan (CPP) activities will continue through this process. Any necessary remediation will be completed prior to, or in association with, redevelopment. This includes all eight lots currently owned by the Mihata Corporation, identified as Block 2283, Lots 25, 28, 31, 33, 35, 38, 41, and 43;

    - Descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;

    - A provision for evaluation of the potential for soil vapor intrusion for any occupied buildings on the site, including a provision for implementing actions recommended to address exposures related to soil vapor intrusion;

    - A provision that should a building foundation or building slab be removed in the future a cover system consistent with that described in Paragraph 1 above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);

    - Provisions for the management and inspection of the identified engineering controls;

    - Maintaining site access controls and Department notification; and

        - The steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

    - B) A monitoring plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

        - A schedule of monitoring and frequency of submittals to the Department; and

        - Monitoring for vapor intrusion for any buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

- 4) Green remediation principals and techniques will be implemented to the extent feasible in the site management of the remedy as per DER-31. The major green remediation components are as follows;

    - Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;

    - Reducing direct and indirect greenhouse gas and other emissions;

    - Increasing energy efficiency and minimizing use of non-renewable energy;

    - Conserving and efficiently managing resources and materials;

    - Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste.

Assessment

The Proposed Actions would facilitate development of an approximately 283,433 –gsf, 135-foot-tall (roof height) mixed-use building on the Development Site (Block 2283, Lots 25, 28, 31, 33, 35, 38, 41 and 43) that would require excavation on the entire Development Site (approximately 40,000 sf) at a depth of approximately 26 feet below-grade to accommodate to the two proposed cellar floors. To ensure protection of public health and the environment, any required excavation and/or remediation at the site would be done in accordance with the SMP and all work would be required to comply with Institutional and Engineering Controls (ICs and ECs) outlined in the SMP and Environmental Easement. With the IC and EC's in place, the Proposed Actions would not result in significant adverse hazardous materials impacts and no further analysis is necessary.

With the requirements of the SMP and the Environmental Easement applicable to Development Site, as well as the creation of a site cover, there would be no impact from the potential presence of contaminated materials. The implementation of the preventative and remedial measures outlined in the SMP or any future modifications thereto are subject to NYSDEC oversight to ensure protection of public health and the environment. This would preclude the potential for significant adverse hazardous materials impacts from the Proposed Actions on the Development Site. In addition, as the Development Site would remain capped by either impervious material and/or two feet of clean fill, there would not be significant adverse hazardous materials impacts on the Development Site.

In addition, although the Proposed Actions have the potential to introduce new activities or processes using hazardous materials, these activities would comply with all pertinent regulations and therefore will not increase the risk of human exposure. Therefore, the Proposed Actions would not have the potential to result in significant adverse hazardous materials impacts and no further assessment is warranted.

Transportation

The objective of a transportation analysis is to determine whether the Proposed Actions may have a potentially significant adverse impact on traffic operations and mobility, public transportation facilities and services, pedestrian elements and flow, safety of all roadway users (pedestrians, bicyclists, and vehicles), on- and off-street parking or goods movement.

The *CEQR Technical Manual* identifies minimum development densities that potentially require a transportation analysis. Development at less than the development densities shown in Table 16-1 of the *CEQR Technical Manual* generally result in fewer than 50 peak-hour vehicle trips, 200 peak-hour subway/rail or bus transit riders, and 200 peak-hour pedestrian trips, where significant adverse impacts are considered unlikely. In Zone 2 (which includes the Project Area) the development thresholds applicable to the Proposed Actions are 100,000 gsf of office, 15,000 sf of local retail, 20,000 gsf of restaurant, and 85 parking spaces. As the Proposed Actions/RWCDS increment exceeds the thresholds for office and retail, a detailed analysis was prepared and is presented in **Attachment H, "Transportation"**.

Based on the detailed analysis detailed in **Attachment H**, the anticipated level of new transportation demand generated by the Proposed Actions is not expected to result in any significant adverse impacts to traffic, parking, transit or pedestrian conditions in the vicinity of the project site. As per *CEQR Technical* Manual criteria, detailed traffic and transit analyses were not warranted. A total of two pedestrian elements (sidewalks) were analyzed as part of the detailed pedestrian analysis, and a detailed parking analysis was conducted within ¼-mile of the Development Site during the weekday midday peak hour, with no impacts anticipated as a result of project-generated trips. Additionally, crash data for the traffic and pedestrian study area intersections were obtained from the New York City Department of Transportation (NYCDOT) for the 3-year reporting period between January 1, 2017 and December 31, 2019. As detailed in **Attachment H**, there were no intersections located within the traffic and pedestrian study areas that were identified as high crash locations

Air Quality

According to the guidelines provided in the *CEQR Technical Manual*, air quality analyses are conducted in order to assess the effect of an action on ambient air quality (i.e., the quality of the surrounding air), or effects on the project because of ambient air quality. Air quality can be affected by "mobile sources," pollutants produced by motor vehicles, and by pollutants produced by fixed facilities, i.e., "stationary sources." As per the *CEQR Technical Manual*, an air quality assessment should be carried out for actions that can result in either significant adverse mobile source or stationary source air quality impacts. Per the EAS Form, further analyses of air quality mobile sources from action-generated and/or action-diverted vehicle trips and of emissions from industrial sources has been screened out in accordance with *CEQR Technical Manual* assessment screening thresholds. In addition, the Proposed Actions would not introduce any air quality sensitive receptors as commercial and industrial uses would be present on the development site at similar densities under both No-Action and With-Action conditions.

Mobile Source Emissions

As the Proposed Actions would generate peak hour heavy-duty diesel vehicles or their equivalent, a mobile source screening was prepared and is provided in **Attachment I, "Air Quality."** As detailed in **Attachment I**, the Proposed Actions would not result in 170 or more peak hour vehicle-trip ends at any intersection. Therefore, a detailed CO analysis is not required. However, the Proposed Project's $PM_{2.5}$ equivalent truck calculation of vehicular emissions exceeds the HDDVs screening threshold criterion during at least one peak period at all analysis locations with the worst-cases exceedances on North 13th Street at the intersection of Berry Street. As such, a detailed analysis was conducted for this intersection.

As detailed in **Attachment I**, the Proposed Project's $PM_{2.5}$ increment concentrations do not exceed the *de minimis* (24-hour or annual averaging time periods). Therefore, the Proposed Actions would not result in significant adverse air quality impacts related to mobile sources.

Stationary Source Emissions

As the Proposed Actions would result in new heating, ventilation, and air conditioning systems and industrial uses that would ventilate emissions into ambient air, per *CEQR Technical Manual* Chapter 17, "Air Quality," Section 220, an assessment of emissions is warranted for the Proposed Actions. The air quality analysis, provided in **Attachment I, "Air Quality,"** determined that the Proposed Actions would not result in any significant adverse air quality impacts. As detailed in **Attachment I**, in order to preclude the potential for impacts, an (E) designation (E-# TBD) would be recorded against the site. The (E) designation would restrict the height and location of stacks venting industrial source emissions, restrict the height and location of stacks venting hot water boiler emissions, and restrict the hot water boiler to the use of natural gas. Refer to **Attachment I** for more details.

With adherence to the applicable (E) designations proposed for the site, no significant adverse impacts to air quality are anticipated as a result of the Proposed Actions and operation of the subsequent Proposed Project. Therefore, the Proposed Actions would not result in any potentially significant adverse stationary air quality impacts, and further assessment is not warranted.

Noise

The principal types of noise sources affecting the New York City environment are mobile sources (primarily motor vehicles), stationary sources (typically machinery or mechanical equipment associated with manufacturing operations or building heating, ventilating and air conditioning systems) and construction noise. The *CEQR Technical Manual* states that the initial impact screening for noise considers whether the project would: (1) generate any mobile or stationary sources of noise; and/or (2) be located in an area with existing high ambient noise levels. As the Proposed Actions would generate or divert vehicular traffic, but would not represent a substantial new mobile source of noise, a detailed noise analysis is required to identify the noise attenuation necessary to provide acceptable interior noise levels for the proposed project. This analysis is provided in **Attachment J, "Noise."**

Based the detailed analysis provided in **Attachment J**, in the future with the Proposed Actions, maximum noise levels at all noise receptor locations would remain below the 70 dBA CEQR threshold. Therefore, no additional attenuation would be required to ensure an interior noise level of 45 dBA or lower for residential and community facility uses and 50 dBA or lower for commercial office uses and the Proposed

Project would provide sufficient attenuation to achieve the *CEQR Technical Manual* interior noise level guidelines.

Public Health

Public health involves the activities that society undertakes to create and maintain conditions in which people can be healthy. Many public health concerns are closely related to air quality, hazardous materials, construction, and natural resources.

According to the guidelines of the *CEQR Technical Manual*, a public health assessment may be warranted if a project results in a) increased vehicular traffic or emissions from stationary sources resulting in significant adverse air quality impacts; b) increased exposure to heavy metals and other contaminants in soil/dust resulting in significant adverse impacts, or the presence of contamination from historic spills or releases of substances that might have affected or might affect ground water to be used as a source of drinking water; c) solid waste management practices that could attract vermin and result in an increase in pest populations; d) potentially significant adverse impacts to sensitive receptors from noise and odors; e) vapor infiltration from contaminants within a building or underlying soil that may result in significant adverse hazardous materials or air quality impacts; or f) exceedances of accepted federal, state, or local standards.

As discussed herein, as a result of the NYSDEC-issued ROD for State Superfund Site No. 224069 (i.e., the Development Site and the adjacent property (Lot 1)) and the subsequent selected remedy determined by NYSDEC, in consultation with NYSDOH, a number of controls and restrictions related to hazardous materials have been placed on the Development Site, including (i) site cover requirements, (ii) the imposition of institutional controls in the form of an environmental easement for the controlled property which will require compliance with the Department-approved SMP, and (iii) the implementation of green remediation principals and techniques to the extent feasible in the site management of the remedy as per DER-31. As described above, to ensure protection of public health and the environment, any required excavation and/or remediation at the site would be done in accordance with the SMP and all work would be required to comply with ICs and ECs outlined in the SMP and Environmental Easement. With the IC and EC's in place, the Proposed Actions would not result in significant adverse hazardous materials impacts and no further analysis was warranted (see the 'Hazardous Materials' section above). However, detailed analyses of air quality and noise were required for the Proposed Actions. As shown in the analysis provided in **Attachment I, "Air Quality"** and **Attachment J, "Noise,"** the Proposed Actions would not result in significant adverse air quality or noise impacts. Therefore, the Proposed Actions do not have the potential to result in significant adverse public health impacts and further assessment is not warranted.

Neighborhood Character

As this EAS provides a detailed analysis of land use, zoning, and public policy, a preliminary screening analysis is needed to determine if a detailed neighborhood character analysis is needed.

Neighborhood character is an amalgam of various elements that give neighborhoods their distinct "personality." According to the *CEQR Technical Manual*, a preliminary assessment may be appropriate if a project has the potential to result in significant adverse impacts on any of the following technical areas: land use, zoning, and public policy; socioeconomic conditions; open space; historic and cultural resources; urban design and visual resources; shadows; transportation or noise. Per the analyses provided in this

EAS, although the Proposed Actions required supplemental screening or detailed analyses of some of these technical areas, there would be no project-generated significant adverse impacts.

The *CEQR Technical Manual* also states that for projects not resulting in significant adverse impacts to any technical areas related to neighborhood character, additional analyses may be required to determine if the Proposed Actions would result in a combination of moderate effects to several elements that cumulatively may affect neighborhood character. However, the *CEQR Technical Manual* indicates that neighborhood character impacts are rare and it would be unusual that, in the absence of a significant adverse impact in any of the relevant technical areas, a combination of moderate effects in the neighborhood would result in any significant adverse impact to neighborhood character.

The Proposed Actions would not adversely affect any defining feature of the surrounding area's (i.e., the 400-foot study area) neighborhood character. Some of the study area's defining features reflect longstanding, historic manufacturing and industrial buildings (e.g., the LPC-designated and S/NR-eligible Hecla Iron Works building), though many of which have either been converted to commercial/office uses in the last 10 years, or redeveloped with newer construction. Some of the neighborhood's other defining features include buildings that are built to the lot lines, creating contiguous street walls throughout much of the study area; a street grid configuration resulting in generally regular, rectangular block forms, with streets flanked by concrete sidewalks adorned with street lights, street trees, and other common street objects (such as street and traffic signage, fire hydrants, mail boxes, and waste containers); publicly accessible open space, including McCarren Park, the Privately Owned Public Space (POPS) at 25 Kent Avenue, and the public plaza underneath the nearby William Vale Hotel; and obscured views of the Manhattan skyline along the east-west streets within the 400-foot study area. The Proposed Actions would facilitate the redevelopment of a site that is underutilized with a new development containing commercial and light industrial uses. This would continue the existing trend in commercial office construction in the Williamsburg Northside neighborhood and would not conflict with the surrounding activities or land use patterns. While the LPC-designated and S/NR-eligible Hecla Iron Works landmarked building is within 400-feet of the Development Site, the Proposed Actions would not result in development that would diminish the qualities that make the LPC-designated and S/NR-eligible building historically and architecturally significant. Furthermore, it should be noted that under No-Action conditions, the light industrial uses would not be protected by the IBIA Required Industrial Use provision.

In addition, as noted above, the Proposed Actions would not result in substantial increases in transportation demand and noise levels in the area. The requested special permits to modify use, accessory off-street parking and loading requirements would require that industrial uses be provided in future developments located within the proposed IBIA and would exclude certain uses (including hotels) from the bonus commercial floor area. As such, the Proposed Actions are intended to maintain the area's existing industrial character by leveraging the area's strong demand for commercial space, which would add jobs and firms that would activate the area. Therefore, the Proposed Actions would not result in any significant adverse impacts to neighborhood character and no further analysis is warranted.

Construction

Construction impacts, although temporary, can include disruptive and noticeable effects of a project. Determination of their significance and need for mitigation is generally based on the duration and magnitude of the impacts. Based on *CEQR Technical Manual* guidelines, where the duration of construction is expected to be short-term (two years or less), any impacts resulting from construction generally do not require detailed assessment.

Construction of the Applicant-controlled Proposed Development Site is expected to begin in 2024, following approval of the Proposed Actions, and would be completed in up to 18 months, by late 2025. The Development Site is occupied by eight single-story warehouse/light industrial buildings and would require each building to be demolished. Construction of the Proposed Project would also require site excavation in order to construct two cellar levels that reach to a depth of approximately 26 feet below-grade.

Table B-2 illustrates the conceptual construction sequencing of the Proposed Project at the Development Site associated with the Proposed Actions. As shown in **Table B-2**, it is expected that the Proposed Project would take up to approximately 18 months to complete, and would undergo an initial approximately two months of demolition/excavation/remediation/foundation work, approximately seven months of building superstructure erection, and approximately nine months of exterior and interior building fit-out.

TABLE B-2: Conceptual Construction Schedule Sequencing for Proposed Development Site

	2024												2025												2026												2027											
Building	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Development Site																																																

Demolition/Excavation/Foundation
Building Superstructure/Exterior
Interior Fit-Out

As indicated on the EAS Form, the Proposed Actions may result in "closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, etc.)." Specifically, sidewalk sheds and related construction may result in the temporary closing or narrowing of the sidewalk and portions of the roadway in front of the project site. However, such a condition would be of a short-term nature, as action-generated construction would have a duration of 18 months. As such, no incremental increase in the scope or duration of such effects would occur under With-Action conditions. Such closures or narrowing would be subject to permits issued by the City, which ensure that measures protective of public safety are implemented and that any impediments to vehicular and pedestrian travel are minimized to the greatest extent possible. Given the size of the Project Area and scale of the Proposed Project, these conditions would be typical of construction activities throughout the City. As indicated in the *CEQR Technical Manual* such effects, when two years or less in duration, are not generally considered to result in significant adverse construction impacts and do not require detailed analysis.

Additionally, according to the guidelines in the *CEQR Technical Manual*, construction impacts may occur on historic and cultural resources if in-ground disturbances or vibrations associated with project construction could undermine the foundation or structural integrity of nearby resources. As discussed above, the Development Site does not contain any architecturally and/or archaeologically significant resources of concern, and while Development Site is within 400 feet of the LPC-designated and S/NR-eligible Hecla Iron Works building, there are no architectural (i.e., S/NR-listed or LPC-designated) or archaeological resources within 90 feet of the Development Site. Therefore, based on *CEQR Technical Manual* guidance, the Proposed Actions would not have the potential to result in any significant adverse construction-related impacts to historic resources.

As described above, the Proposed Project would require excavation on the entire Development Site (approximately 40,000 sf) at a depth of approximately 26 feet below-grade to accommodate to the two

proposed cellar floors. To ensure protection of public health and the environment, any required excavation and/or remediation at the site would be done in accordance with the SMP (described above in the 'Hazardous Materials' section) and all work would be required to comply with the ICs and ECs outlined in the SMP and Environmental Easement. With the requirements of the SMP and the Environmental Easement applicable to the Development Site, as well as the creation of a site cover, there would be no impact from the potential presence of contaminated materials. The implementation of the preventative and remedial measures outlined in the SMP or any future modifications thereto are subject to NYSDEC oversight to ensure protection of public health and the environment. This would preclude the potential for significant adverse hazardous materials impacts from the Proposed Actions on the Development Site. In addition, as the Development Site would remain capped by either impervious material and/or two feet of clean fill, there would not be significant adverse hazardous materials impacts on the Development Site.

As also indicated on the EAS Form, the Proposed Actions would not meet any other conditions that may require further screening or detailed analysis of construction effects. Accordingly, the Proposed Actions would not have the potential to result in significant adverse construction impacts and no further assessment is warranted.

ATTACHMENT C

LAND USE, ZONING, & PUBLIC POLICY

I. INTRODUCTION

This attachment examines the Proposed Actions' compatibility and consistency with land use patterns in the surrounding area, ongoing development trends, land use and zoning policies, as well as other public policies. This assessment provides a description of the existing land use, zoning, and public policy conditions in the primary and secondary study areas, which are defined as the locations where the direct and indirect effects of the Proposed Actions, respectively, may occur. The assessment also forecasts land use, zoning, and public policy conditions in the future without the Proposed Actions (the "No-Action" condition). The No-Action condition is determined by identifying developments and other relevant changes anticipated to occur by the completion of the Applicant's Proposed Project, which is expected to be 2025. The No-Action condition serves as the baseline condition against which the Proposed Actions' incremental changes are measured. Finally, the assessment forecasts land use, zoning, and public policy conditions with the completion of the Proposed Project in the future with the Proposed Actions (the "With-Action" condition) and makes a determination as to the potential for significant adverse impacts on land use, zoning, and public policy.

As described in **Attachment A, "Project Description,"** the Proposed Actions consist of a series of discretionary approvals necessary to facilitate the Proposed Project, including:

- A zoning map amendment to rezone the Development Site (Block 2283, Lots 25, 28, 31, 33, 35, 38, 41 and 43) from M1-1 to M1-2;
- A zoning text amendment to Zoning Resolution Section (ZR §) 74-96, affecting the eastern part of Block 2283 to a depth of 200 feet measured from Berry Street (encompassing the entire Development Site), designating this area an Industrial Business Incentive Area (IBIA);
- A special permit pursuant to ZR § 74-963 et seq to increase the maximum permitted commercial and industrial FAR from 2.0 to approximately 4.8 FAR in a M1-2 district[1] by providing Required Industrial land use and modifications to public plaza requirements; to modify the accessory off-street parking requirement at the Development Site to be reduced from 724 to 80 spaces; and to modify the loading berth requirement at the Development Site to be reduced from seven berths to two;
- By designating the Development Site as an IBIA, the Zoning Text Amendment would make the IBIA special permit pursuant to ZR § 74-962 available on the Development Site. As such, the Proposed Project would provide up to approximately 32,990 gross square feet (gsf) (32,000 zoning square feet [zsf]) of Required Industrial Uses (0.80 FAR) and up to approximately 83,630 gsf (80,000 zsf) of Incentive Uses (2.0 FAR) to occupy floor area beyond that permitted by the proposed M1-2 district.

These approvals would facilitate an approximately 283,433 gsf (192,000 zoning square feet [zsf])

[1] For M1-2 districts absent IBIA regulations, only community facility uses are permitted a maximum FAR of 4.8, whereas the maximum permitted FAR for commercial and industrial uses is 2.0.

commercial and manufacturing development (4.8 FAR) with a 4,800-sf public plaza. The Proposed Project would be approximately 10 stories tall, containing 184,561 gsf (151,057 zsf) of commercial uses, 32,990 gsf (32,000 zsf) of manufacturing space, and 65,882 gsf (8,042 zsf) of accessory off-street parking uses (the "Proposed Project"). The Proposed Project would also include a 4,800-sf public plaza that would front Berry Street, as well as 4,890-sf of publicly accessible areas (PAAs) that would flank the public plaza and front Berry Street, North 12th Street and North 13th Street. Approximately 65,882 gsf (8,042 zsf) of accessory self-parking and mechanical space would be located on the ground floor and two sub-cellar levels and would contain approximately 80 accessory off-street parking spaces. Access and egress to these spaces, as well as the two loading berths, would be provided by two existing, approximately 22-foot-wide curb cuts via North 13th Street. The Development Site is an approximately 40,000-sf, square-shaped lot with approximately 200 feet of frontage along each bounding street—Berry Street to the east, North 13th Street to the north, North 12th Street to the south—and a 200-ft lot line to the west. Block 2283, which contains the Development Site, is currently an M1-1 district and is bound by North 13th Street, Berry Street, North 12th Street, and Wythe Avenue, and is located in the Greenpoint neighborhood of Brooklyn Community District (CD) 1.

In the future without the Proposed Actions, it is anticipated that the Development Site would not be redeveloped and all structures would remain in their existing condition: eight lots, each with a single-story, approximately 5,000 gsf building. However, considering recent real estate trends in the area, it is assumed that the Applicant would convert six of the eight buildings to as-of-right retail spaces while retaining the remaining two as warehouse uses. No accessory parking would be developed. Therefore, in the No-Action scenario, the Development Site would contain approximately 10,000 gsf of light industrial/warehouse space, 30,000 gsf of local retail space, and would have an FAR of 1.0.

Compared to No-Action conditions, the Proposed Actions would result in the net increment of approximately 22,990 gsf of industrial space, 124,224 gsf of office space, 17,171 gsf of retail space, 13,166 gsf of restaurant space, 9,690 sf of publicly accessible open space (including 4,800 sf of public plaza and 4,890 sf of PAA space), and 80 parking spaces, for a total increment of approximately 243,433 gsf of building area. The Proposed Actions would also result in the net increment of 112 feet of additional building height (+9 stories). The net incremental difference between the With-Action and No-Action scenarios serves as the basis for the environmental impact analyses (Refer to **Table C-3**).

The assessment provided in this attachment concludes that the Proposed Actions would be compatible with, and supportive of, land use, zoning and public policies in the area. As shown in the analysis presented in this attachment, the Proposed Actions would not result in significant adverse impacts related to land use, zoning, and public policy.

II. METHODOLOGY

The purpose of this attachment is to examine the effects of the Proposed Actions, as defined, and determine whether or not it would result in any significant adverse impacts on land use, zoning, or public policy. The analysis methodology is based on the guidance of the *CEQR Technical Manual* and examines the Proposed Actions' consistency with land use patterns and development trends, zoning regulations, and other applicable public policies.

According to the *CEQR Technical Manual*, a detailed assessment of land use, zoning, and public policy may be appropriate when a change in land use and zoning would occur and a preliminary assessment cannot

succinctly describe land use conditions in the study area. As the Proposed Actions involve a zoning map amendment, zoning text amendment, and special permits that would result in changes to permitted densities, uses, and bulk, a detailed assessment is necessary to provide a sufficient description and assessment of the effects on conditions. In addition, a detailed assessment is needed to sufficiently inform other technical reviews and determine whether changes in land use could affect conditions analyzed in those technical areas. Therefore, this attachment includes a detailed analysis that involves a thorough description of existing land uses within the directly affected area and the broader study area. Following the guidelines of the *CEQR Technical Manual*, this analysis describes existing and anticipated future conditions to understand the relationship of the Proposed Actions to such conditions, assesses the nature of any changes on these conditions that would be created by the Proposed Actions, and identifies those changes, if any, that could be significant or adverse.

Analysis Year

The analysis year is the anticipated RWCDS completion date of 2025. Therefore, the future No-Action condition accounts for land use and development projects, initiatives, and proposals expected to be completed by 2025.

Study Area Definition

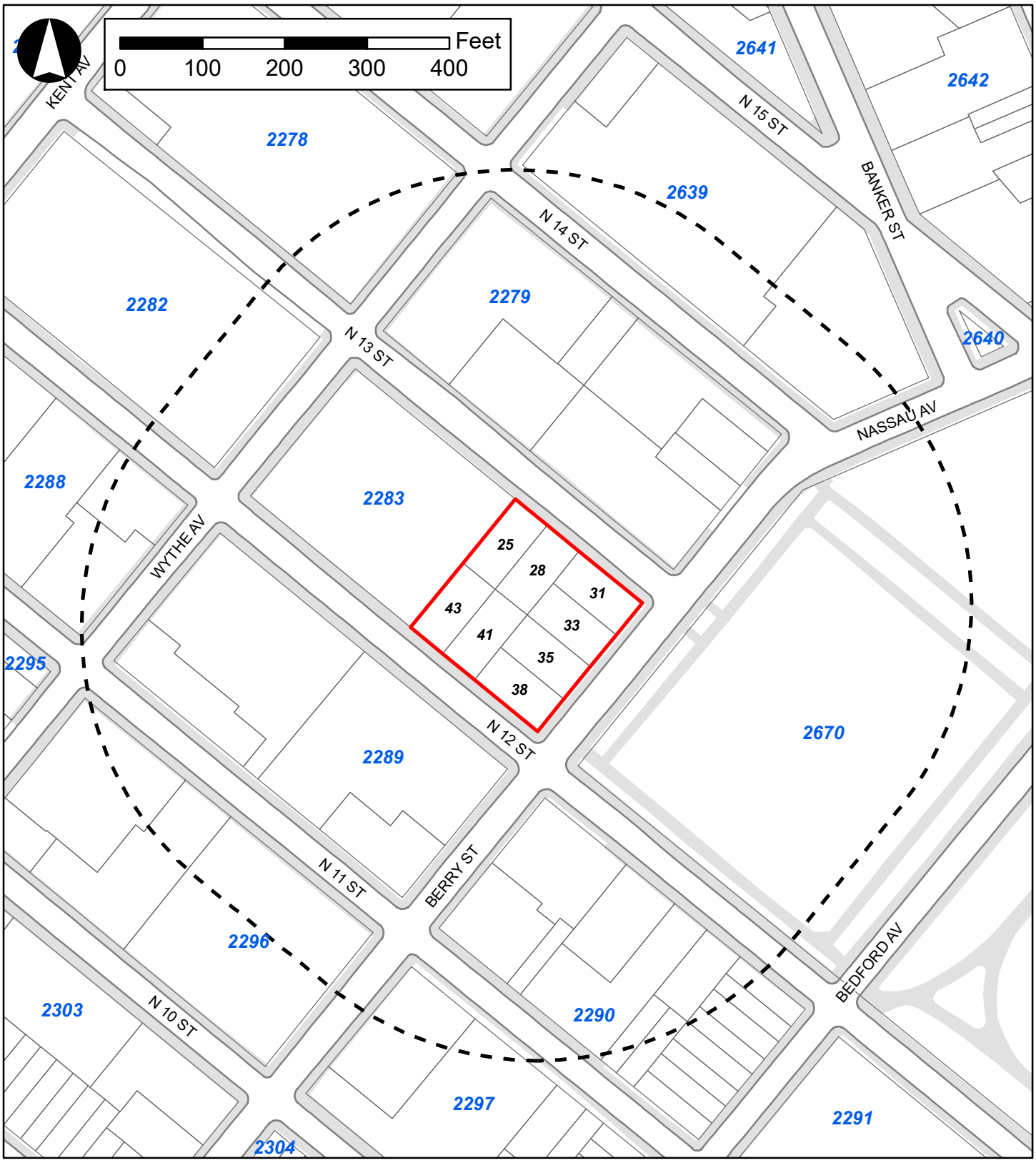
In order to identify and assess the direct and indirect effects of the Proposed Actions, this analysis has defined two study areas within which the Proposed Actions would have the potential to affect land use or land use trends. Following guidance provided in the *CEQR Technical Manual*, these include a primary study area which would be affected directly by the Proposed Actions (i.e., the IBIA-designated Development Site (Block 2283, Lots 25, 28, 31, 33, 35, 38, 41 and 43)), and a secondary study area encompassing properties that have the potential to experience indirect impacts as a result of the Proposed Actions. According to the *CEQR Technical Manual*, the appropriate size of the secondary study area for land use, zoning, and public policy is related to the type and size of the Proposed Project, as well as the location and context of the area that could be affected by the project. Study area boundaries vary according to these factors, with suggested study areas ranging from 400 feet for a small project to 0.5 miles for a very large project. Given the geographic scope of the Proposed Actions and the scale of the Proposed Project relative to the density of the surrounding area, a 400-foot radius of the Development Site has been selected as the secondary study area as it is considered unlikely that the Proposed Actions would have indirect effects beyond a 400-foot radius.

As shown in **Figure C-1**, the secondary study area extends an approximate 400-foot radius from the boundary of the primary study area. The secondary study area is generally bound by North 14th Street, Bedford Avenue, North 11th Street, and Wythe Avenue.

Data Sources

Existing land uses in the study area were identified through the review of a combination of sources including field surveys and secondary sources. Relevant sources included the City's Primary Land Use Tax Lot Output (PLUTO™) data files for 2021 and websites such as the NYC Open Accessible Space Information System (OASIS, www.oasisnyc.net) and NYCityMap (http://gis.nyc.gov/doitt/nycitymap/). Further information was gathered from relevant New York City Zoning Maps and the Zoning Resolution of the City of New York to gain insight into existing zoning districts in the study areas and provide the basis for the zoning evaluation for future No-Action and With-Action scenarios. Relevant public policy documents

Study Areas



Source: NYCDCP (PLUTO 2021, Version I); DoITT (2020)

Legend

- Primary Study Area (Development Site)
- Secondary Study Area (400-foot Radius)
- 3499 Blocks
- 24 Lots

recognized by the New York City Department of City Planning (DCP) and other City agencies were utilized to describe existing public policies pertaining to the study areas.

III. EXISTING CONDITIONS

While the description of existing conditions focuses on a "snapshot-in-time" of the study areas as they exist at the time this EAS was prepared, it should be noted that this is a dynamic area that has been experiencing a strong upward trend of increased development as vacant and underutilized industrial and commercial properties are frequently redeveloped.

Land Use

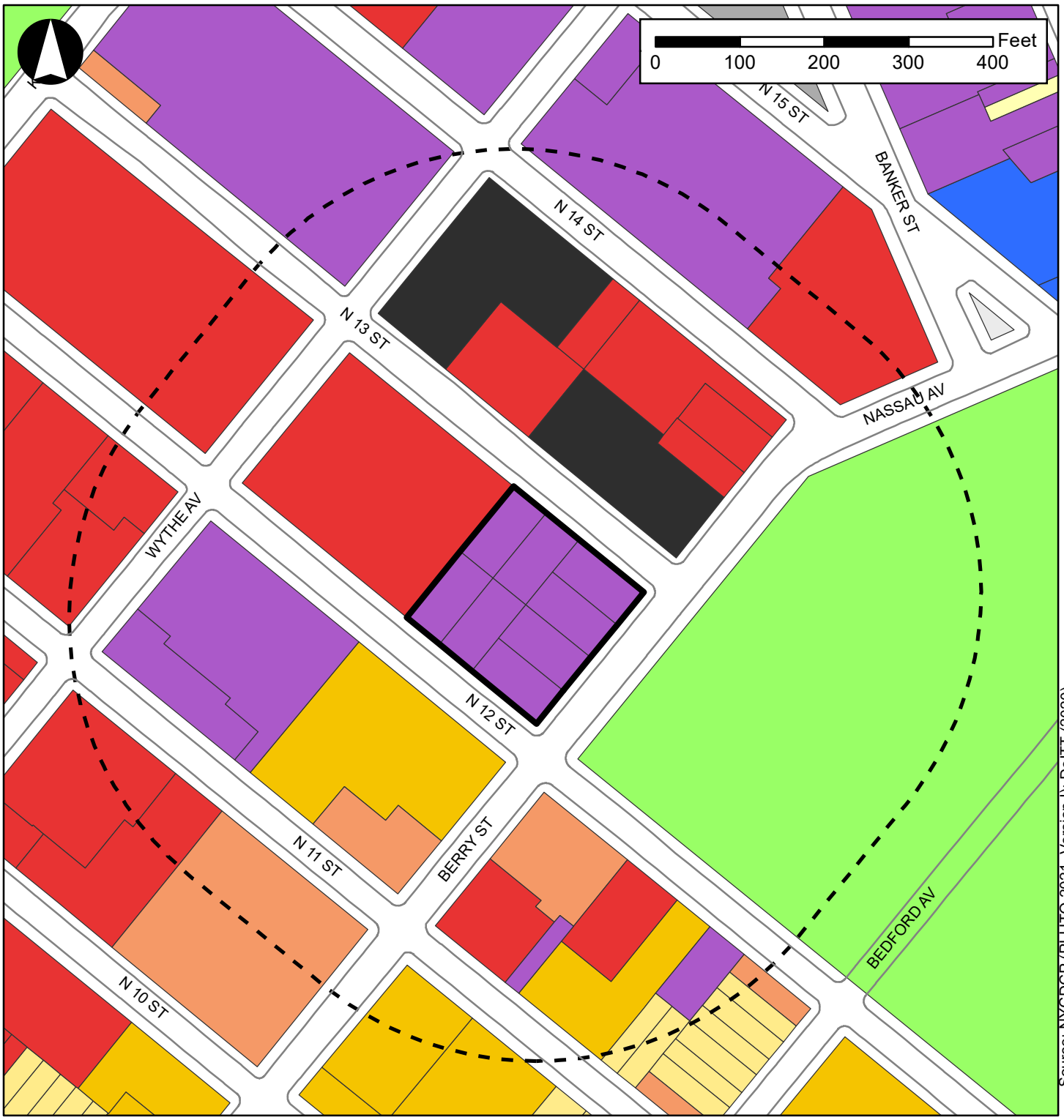
Primary Study Area (Development Site)

The primary study area comprises an approximately 40,000-sf eastern portion of Brooklyn Block 2283, which is bound by North 13th Street to the north, Berry Street to the east, North 12th Street to the south, and Wythe Avenue to the west. It comprises eight Applicant-owned, rectangular-shaped tax lots (Lots 25, 28, 31, 33, 35, 38, 41, and 43). The primary study area has approximately 200 feet of frontage on both the south side of North 13th Street and the north side of North 12th Street, and approximately 200 feet of frontage along Berry Street. North 13th Street is a two-way, east-westbound street with a width of 30 feet. North 12th Street is a one-way, westbound street with a width of 30 feet. Berry Street is a one-way, northbound street with a width of 36 feet. All three streets are defined as narrow.

As shown in **Figure C-2**, land use in the primary study area is comprised of approximately 40,000 gsf of industrial/manufacturing uses or former industrial/manufacturing uses (currently, only two lots – Lots 28 and 31 – are occupied by active light industrial uses, while the remainder of the lots within the primary study area – Lots 25, 33, 35, 38, 41, and 43 – are improved, former industrial buildings that are currently unoccupied). Each of the eight lots that make up the primary study area contains a single-story warehouse/light-industrial building with frontage along Berry Street, North 13th Street, and/or North 12th Street: Lots 25 and 28 have 50 feet of frontage along North 13th Street; Lots 33 and 35 have 50 feet of frontage along Berry Street; Lots 41 and 43 have 50 feet of frontage along North 12th Street, and Lots 31 and 38 each have 50 feet of frontage along Berry Street, as well as 100 feet along North 13th Street and North 12th Street, respectively.

The primary study area is serviced by several public transit options. The Nassau Avenue G subway station (at the intersection of Manhattan and Nassau Avenues) is located approximately 0.3 miles northeast of the Development Site. The Bedford Avenue L station (at the intersection of Bedford Avenue and North 7th Street) is located approximately 0.4 miles southeast of the Development Site. In addition to the subway, bus routes serving the area include the B32 (connecting Williamsburg Bridge Plaza and Long Island City) which runs along Kent and Wythe Avenues, and the B62 (connecting Downtown Brooklyn/Fulton Mall and Long Island City) which runs along Bedford and Driggs Avenues. In regards to alternate transportation methods, there is a CitiBike docking station located within walking distance of the Development Site at the corner of North 12th Street and Bedford Avenue. Bike lanes are located nearby on Wythe Avenue and Berry Street.

Existing Land Uses



Legend

- Primarey Study Area (Development Site)
- Secondary Study Area (400-Foot Radius)

Land Use

- One and Two Family Buildings
- Multi-Family Walkup Buildings
- Multi-Family Elevator Building
- Mixed Commercial/Residential Buildings
- Commercial/Office Buildings
- Industrial/Manufacturing
- Transportation/Utility
- Public Facilities and Institutions
- Open Space
- Parking Facilities
- Vacant Land
- All Others or No Data

Secondary Study Area (400-Foot Radius)

The secondary study area (see **Figure C-1**) encompasses properties that have the potential to experience indirect impacts because of the Proposed Actions; for the Proposed Project, it includes all or part of 20 blocks. Similar to the rest of waterfront and nearby upland blocks in Williamsburg and Greenpoint, this area was developed more than 100 years ago during Brooklyn's industrial age when large commercial docks, factories, oil refineries, and shipyards dominated both sides of the East River. Of these developments include the LPC-designated and S/NR-eligible Hecla Iron Works Building located at 100-118 North 11th Street (Brooklyn Block 2296, Lot 14), which was constructed in 1896-1897 and supplied ornamental work for the exteriors and interiors of many LPC-designated landmarks, including the American Surety Building (100 Broadway, Manhattan), New York Life Insurance Company Building (346 Broadway, Manhattan), B. Altman & Co. Department Store (355-371 Fifth Avenue, 188-198 Madison Avenue, Manhattan), and Grand Central Terminal. The Hecla firm also produced the 133 original kiosks for the IRT subway system (see Attachment B, "Supplemental Screening" for a more detailed description of this historic resource). Further inland from the waterfront, residential neighborhoods were developed to house workers who worked at these industrial spaces. Over time, as manufacturing and industrial operations on the waterfront declined, these neighborhoods developed their unique blend of residential, commercial, and industrial uses.

In recent years, these neighborhoods have continued to grow and change. As refineries and shipyards departed, new businesses emerged to take their place. Due to the neighborhood's character, close proximity to Manhattan, eclectic building typologies, and comparatively low rents, Williamsburg and Greenpoint became sought-after neighborhoods for artists and Manhattan commuters. Despite this recent influx of new residents, the industrial areas nearest the waterfront and large lots near the primary study area remained largely underutilized, a product of zoning restrictions on residential use and changing economic conditions.

While new developments in Greenpoint-Williamsburg's historically industrial areas have indicated a shift towards entertainment and nightlife uses, the borough of Brooklyn generally has seen an increase in its quantity and occupancy of office space. An increase in demand for office space in the borough can be seen mostly from companies within industries surrounding media, technology, and creativity, with new tenants flocking to Downtown Brooklyn, DUMBO, the Brooklyn Navy Yard, and the greater Greenpoint-Williamsburg area. Examples of said tenants include Amazon Photo Studio, Vice Magazine, Kickstarter, Etsy, and other smaller startup companies. Commonly cited reasons for this increase in the demand for office space include the desire of tenants to occupy converted loft-spaces and the attraction of operating in close proximity to the communities in which their workforces reside.

The predominant land use in the 400-foot secondary study area is commercial and office (see **Figure C-2** and **Table C-1**). The secondary study area also includes several industrial and manufacturing uses, as well as mixed-residential and commercial uses, residential uses, and two vacant lots. Both vacant lots have frontages on the south side of North 13th Street, across from the Development Site. Examples of commercial uses in the study area include restaurants, retail shops, office space, and hotels. In the past decade, several buildings in the study area have been renovated or rebuilt to accommodate these shifts in land use.

Table C-1: Existing Land Uses within the Secondary Study Area[1]

Land Use	Number of Lots	Percentage of Total Lots (%)	Lot Area (sf)	Percentage of Total Lot Area (%)	Building Area (sf)	Percentage of Total Building Area (%)
Residential (Total)	3	15.0%	54,500 sf	17.0%	206,954 sf	28.2%
One and Two Family	0	0.0%	0 sf	0.0%	0 sf	0.0%
Multi-Family Walkup	1	5.0%	2,500 sf	0.8%	3,750 sf	0.5%
Multi-Family Elevator	2	10.0%	52,000 sf	16.2%	203,204 sf	27.7%
Mixed Commercial/Residential	2	10.0%	48,430 sf	15.1%	103,333 sf	14.1%
Commercial/Office	9	45.0%	116,721 sf	36.4%	362,948 sf	49.5%
Industrial/Manufacturing	4	20.0%	51,450 sf	16.0%	59,807 sf	8.2%
Transportation/Utility	0	0.0%	0 sf	0.0%	0 sf	0.0%
Public Facilities & Institutions	0	0.0%	0 sf	0.0%	0 sf	0.0%
Open Space	0	0.0%	0 sf	0.0%	0 sf	0.0%
Parking Facilities	0	0.0%	0 sf	0.0%	0 sf	0.0%
Vacant Land	2	10.0%	49,795 sf	15.5%	0 sf	0.0%
Total	*28*	*100.0%*	*360,896 sf*	*100.0%*	*773,042 sf*	*100.0%*

Source: NYC Map PLUTO 2021

Note: [1] Includes all lots located outside of the primary study area with a minimum of 50 percent of their lot area within the secondary study area.

There have been a number of new developments completed within the secondary study area in recent years. The 8-story, 70-key Wythe Hotel (at 75 North 11th Street) opened in 2012 and the 22-story, 183-key William Vale hotel – which also includes restaurant, retail and community facility space – both opened in 2016. In 2013, Amazon developed a 40,000-gsf photo studio and office space at 35 Kent Avenue. Additionally, the eight story, approximately 405,156-gsf 25 Kent Avenue development was completed in 2020 and is located one block to the west of the Development Site. 25 Kent Avenue was the first project in the City to establish and map an Industrial Business Incentive Area (IBIA) and apply for a special permit that incentivizes the construction of commercial and/or manufacturing buildings that allocate a portion of their floor area to certain light industrial uses in IBIAs. Since 2016, the IBIA has been expanded several times to include projects at 12 Franklin Street and 103 North 13th Street.

The majority of buildings located within the secondary study area are built to the lot lines, creating continuous street walls throughout the area. Buildings within the secondary study area are typically between one and seven stories tall, with the exception of the hotels (refer to **Figure 6a-6c** in the **EAS Form**).

Zoning

The Development Site (aka primary study area) is located within an M1-1 light manufacturing (high performance) zoning district and there are various other zoning districts present within the 400-foot radius study area. Other zoning districts within the 400-foot radius include an M1-2 light manufacturing (high performance) district, MX-8 M1-2/R6A special mixed-use district, and R6A residential district. **Table**

C-2 describes the zoning districts located within the primary and secondary study areas and provides information about the maximum permitted FAR by use in each zoning district.

Table C-2: Study Area Zoning Districts

District	Definition/General Use	Maximum FAR
M1-1	Light manufacturing—high performance district. M1 districts are often buffers between M2 or M3 districts and adjacent residential or commercial districts. Building heights are governed by sky exposure planes. Parking requirements vary with use.	R: Not permitted C: 1.0 CF: 2.4 (Use Group 4 only) M: 1.0 (Use Group 17 only)
M1-2		R: Not permitted C: 2.0 CF: 4.8 (Use Group 4 only) M: 2.0 (Use Group 17 only)
MX8 (M1-2/R6A)	Special Mixed-Use District. Pairing a light manufacturing-high performance district with a medium density residential district to allow mixed-use buildings. Height is governed by contextual zoning regulations.	R: 3.0 C: 2.0 CF: 3.0 M: 2.0 (Use Group 17 only)
R6A	R6A is a medium-density contextual district where bulk regulations tend to produce high lot coverage, six- to eight-story apartment buildings set at or near the street line.	R: 3.0 C: 0.0 CF: 3.0 M: No permitted

Notes: CF: community facility; R: residential; C: commercial; M: manufacturing

Primary Study Area (Development Site)

M1-1 Zoning

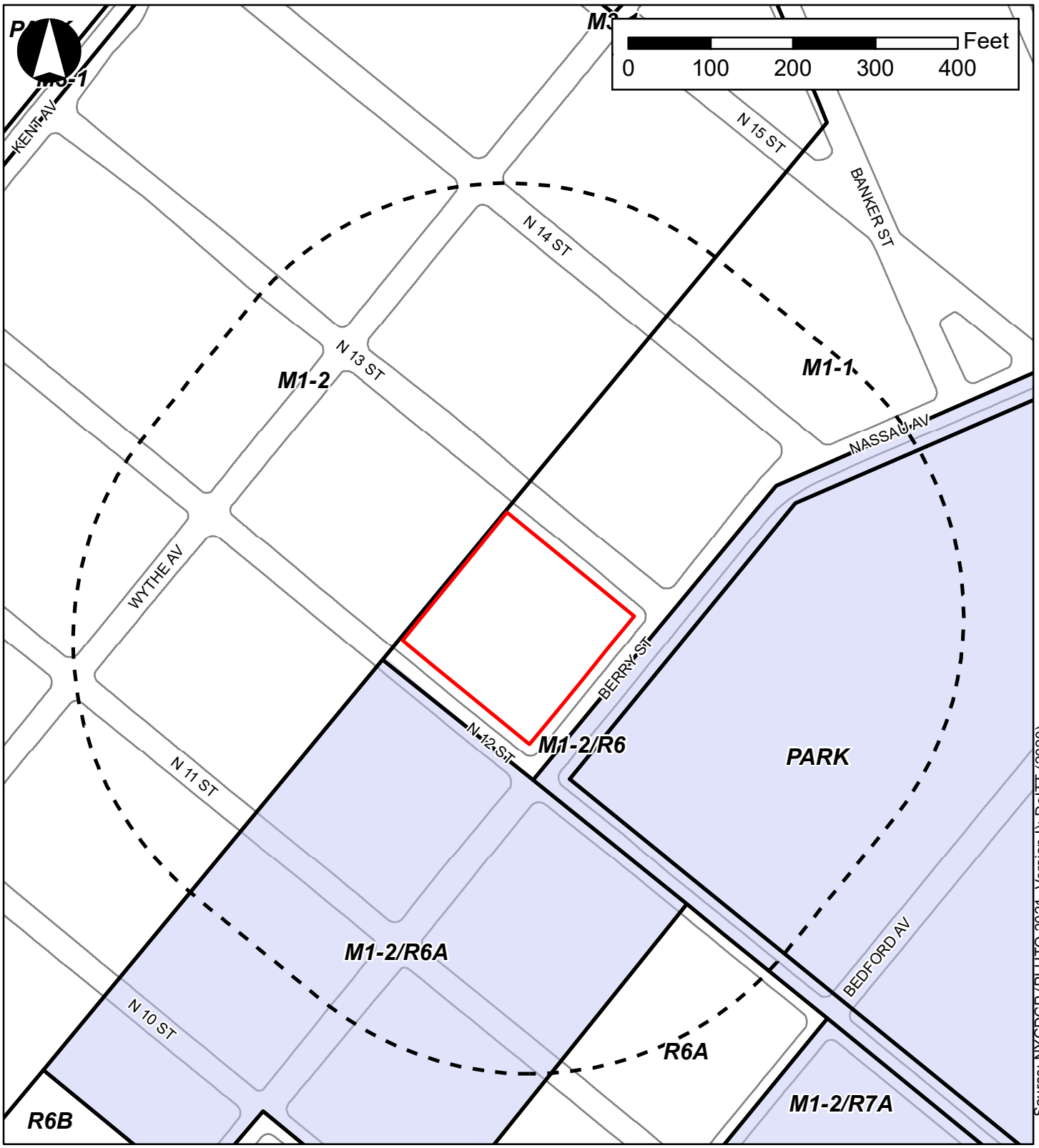
As indicated in **Figure C-3**, the M1-1 zoning district mapped on the Development Site extends northward, and was adopted as part of a rezoning in 1976. This zoning district permits Use Groups 4-14, 16, and 17 to develop within the district with as-of-right maximum floor area ratios (FARs) of 1.0 for manufacturing and commercial uses and 2.4 for community facility uses. Developments in M1-1 districts are governed by the sky exposure plane, which begins thirty feet above the street line. Within M1-1 districts, off-street parking is required and varies by use.

M1 districts are often buffers between M2 and M3 districts and are frequently adjacent to residential or commercial districts. Nearly all industrial uses are allowed in M1 districts if they meet the M1 performance standards. Offices and most retail uses are also permitted; hotels (Use Group 5) require a special permit except for those operated exclusively for the public purpose of temporary housing assistance operated or contracted by the City or State. Certain community facilities, such as hospitals, are allowed in M1 districts only by special permit while others such as houses of worship are permitted as-of-right.

Secondary Study Area (400-Foot Radius)

The Greenpoint-Williamsburg Rezoning resulted in zoning changes that permitted light industrial uses in some areas of the neighborhood but prohibited heavy industrial uses in others. Furthermore, the rezoning allowed residential uses where they previously were not permitted. The rezoning included street de-mappings, zoning text amendments, and zoning map changes, ultimately including a zoning map change to portions of the proposed 400-foot study area. To better reflect the types of manufacturing uses that had come to occupy the area and to ensure that new industrial uses would be fully enclosed and compatible with the nearby residential and mixed-use neighborhoods, the Greenpoint-Williamsburg

Figure C-3
Existing Zoning



Source: NYCDCP (PLUTO 2021, Version I); DoITT (2020)

Legend

- Primary Study Area (Development Site)
- Secondary Study Area (400-foot Radius)
- Zoning District Boundaries
- Special Mixed Use District (MX-8)

Rezoning rezoned portions of the 400-foot study area from an M3-1 heavy manufacturing district to an M1-2 light manufacturing district. M1-2 districts limit activity to light industrial and commercial uses. Additionally, as part of the rezoning, some areas formerly zoned M1-2 were rezoned to an MX-8 with M1-2/R6A district, which allows mixed residential, commercial, and manufacturing uses side-by-side or within the same building subject to high performance standards, reflecting historical patterns of land use in such areas.

M1-2 Zoning

M1-2 districts allow the same uses as-of-right or by special permit only as M1-1 districts but have higher permitted density: a maximum FAR of 4.8 for community facility and 2.0 for commercial and manufacturing. Residential uses, on the other hand, are prohibited. Pursuant to a recently adopted zoning text amendment, developments in Use Group 16D (self-service storage facilities) are not permitted as-of-right in this district (per ZR Appendix J) but instead are only allowed via a special permit under ZR 74-932. M1-2 districts require accessory parking and loading berths, with the required rates varying by Use Group. As for building volumes, streetwalls are not required but, if provided, may reach a maximum height of 60 feet or four-stories, and if above 60 feet, require an initial minimum setback (15 feet for narrow streets and 10 feet for wide streets). Above the base buildings, streetwalls may not penetrate the sky exposure plane. On a narrow street, the vertical to horizontal distance ratio for a sky exposure plane is 2.7:1. On a wide street the vertical to horizontal distance ratio for a sky exposure plane 5.6:1.

Block 2282, bound by North 13th Street, Wythe Avenue, North 12th Street, and Kent Avenue, in the M1-2 district was designated the City's first IBIA in 2016 through the implementation of a zoning text amendment (Land Use Application no.: N160126ZRK). The underlying zoning district in the IBIA remains M1-2 and IBIA sites can be developed either subject to standard M1-2 regulations or pursuant to special permit(s). Information on the IBIA special zoning provisions applicable to buildings developed pursuant to IBIA special permits is provided in **Attachment A, "Project Description."**

MX-8 (M1-2/R6A) Zoning

The Greenpoint-Williamsburg Special Mixed Use District, referred to as the MX-8 district on the Zoning Map, was established as part of the rezoning to encourage investment in, and enhance the vitality of, existing neighborhoods with mixed residential and industrial uses and create expanded opportunities for new mixed-use communities. As a result of the rezoning, new residential and non-residential uses (commercial, community facility, and light industrial) including Use Groups 16, 17 and 18, can be developed as-of-right and can be located side-by-side or within the same building. Within MX districts, residential uses are generally subject to the bulk restrictions of the governing residence district; commercial, industrial, and community facility uses are subject to the M1 district bulk controls, except that community facilities are subject to residential FAR limits. Most light industrial uses are permitted in each MX district as-of-right, others are subject to restrictions, and Use Group 18 uses are excluded altogether with the exception of small breweries.

R6A Zoning

R6A is a contextual district where the Quality Housing bulk regulations are mandatory. These regulations tend to produce high lot coverage, six- to eight-story apartment buildings set at or near the street line; they are designed to be compatible with older buildings found in the surrounding neighborhood. These zoning districts have an FAR of 3.0 and generally require off-street parking for 50 percent of a building's dwelling units if more than five spaces would be required. Requirements are lower for income-restricted

housing units (IRHU) and are further modified in certain areas, like Transit Zones, or for lots less than 10,000 sf. Greater maximum FAR and heights are available for buildings participating in the Inclusionary Housing Program or that provide certain senior facilities.

Public Policy

In addition to zoning, officially adopted and promulgated public policies also describe the intended use applicable to an area or particular site(s) in New York City. These include Urban Renewal Plans, 197-a Plans, Industrial Business Zones (IBZs), the New York City Comprehensive Waterfront Plan, the Criteria for the Location of City Facilities ("Fair Share" criteria), Solid Waste Management Plan, Business Improvement Districts ("BIDs"), the New York City Landmarks Law, the Waterfront Revitalization Program ("WRP"), and OneNYC. Some of these policies have regulatory status, while others describe general goals. They can help define the existing and future context of the land use and zoning of an area.

Public Policies Applicable to the Development Site and/or the Study Area

The Development Site is located within the boundaries of the Greenpoint-Williamsburg IBZ, the Greenpoint 197-a Plan area, the Williamsburg Waterfront 197-a Plan area, the North Brooklyn Empire Zone, and the NYC Coastal Zone, thereby making it subject to the Waterfront Revitalization Program (WRP).

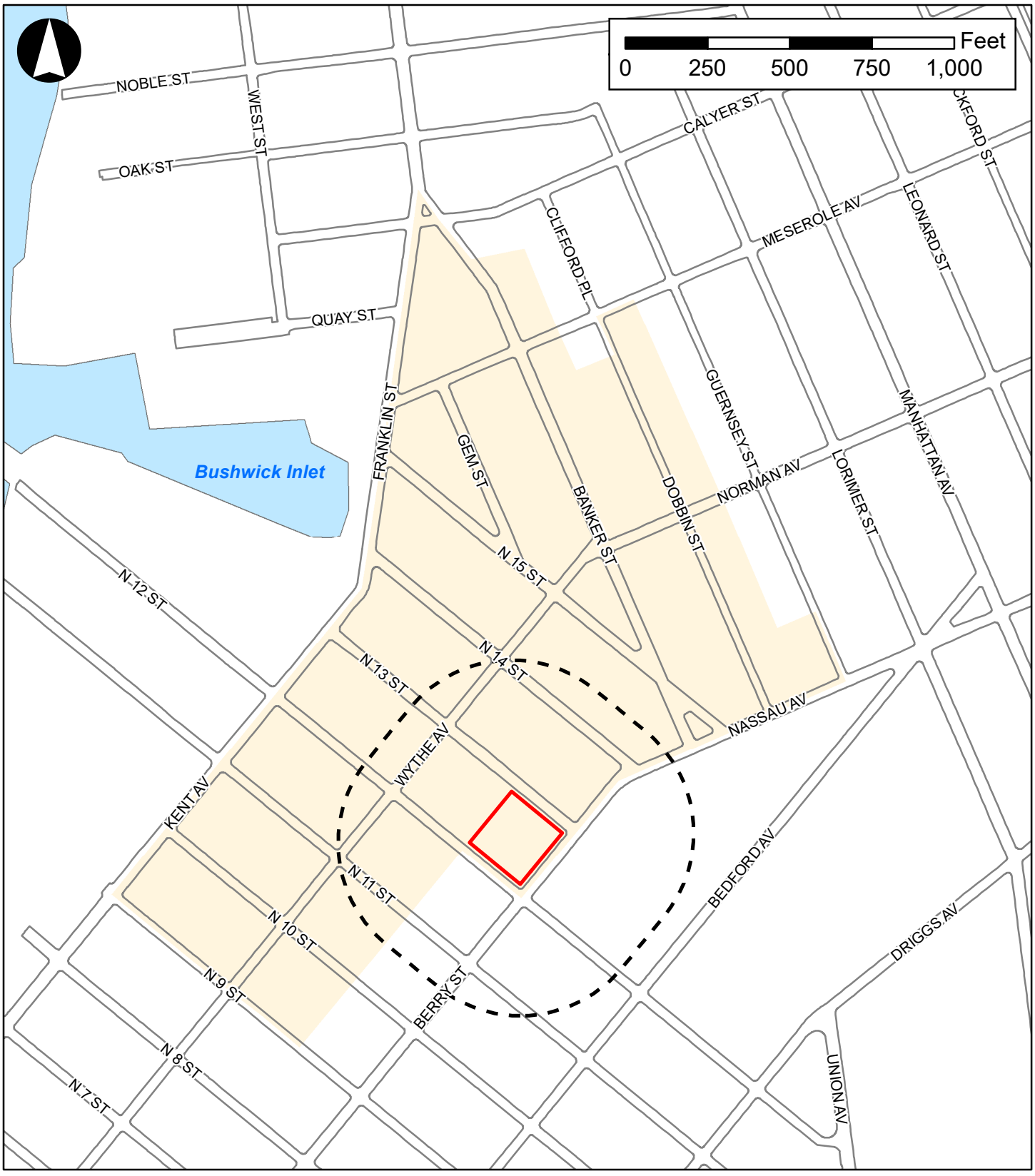
Two Citywide policies considered under CEQR, the *OneNYC* plan and *New York Works*, are particularly relevant to the Development Site and the Proposed Actions given that the RWCDS would result in a new development with commercial and industrial uses in a mixed-use neighborhood served by existing transit services and other public infrastructure.

Greenpoint-Williamsburg IBZ

As shown in **Figure C-4**, the Development Site is located within the Greenpoint-Williamsburg IBZ. The Greenpoint-Williamsburg IBZ covers over twenty blocks (or portions thereof) near the border of the Greenpoint and Williamsburg neighborhoods. More specifically, the Greenpoint-Williamsburg IBZ is bordered by Kent Avenue/Franklin Street to the west, Calyer Street and Meserole Avenue to the north, Banker, Dobbin, and Guernsey Streets to the east, and Nassau Avenue/Berry Street and North 9th Street to the south. In 2006, the Mayor's Office for Industrial and Manufacturing Businesses ratified the establishment of sixteen IBZs in which the City provides expanded assistance services to industrial firms in partnership with local development groups. Since 2006, additional IBZs have been established and the boundaries of select IBZs have been modified. There are currently 21 IBZs throughout New York City. Usually built upon pre-existing In-Place Industrial Parks, IBZs offer various incentives to prevent industrial uses from relocating outside of the City and represent a commitment by the City not to rezone these areas for residential uses.

Planning studies are performed to determine changes that can be made to improve business efficiency within the City's IBZs. These changes can include traffic and parking monitoring, clustering of similar businesses, and IBZ-specific marketing. Higher regulation and steeper penalties for illegal conversions, as well as a guarantee not to rezone to residential districts, help to alleviate real estate uncertainty. Tax incentives also encourage new industrial uses to move to these areas of the City.

Greenpoint-Williamsburg Industrial Business Zone (IBZ)



Source: NYCDCP (PLUTO 2021, Version I); DoITT (2020)

Legend

- Primary Study Area (Development Site)
- Secondary Study Area (400-Foot Radius)
- Greenpoint-Williamsburg IBZ

Within an IBZ, Industrial Business Solutions Providers offer industrial firms guidance accessing appropriate financial and business assistance programs, navigating and complying with regulatory requirements, developing workforces, and ensuring the neighborhood is well maintained. The Industrial Business Solutions Provider for the North Brooklyn IBZ is Evergreen: Your North Brooklyn Business Exchange.

Greenpoint 197-a Plan

Under Section 197-a of the New York City Charter, community boards may propose plans for the development, growth, and improvement of land within their districts. The plans are reviewed in accordance with standards and rules of procedure for 197-a plans, which were developed and adopted by the City Planning Commission (CPC). Once approved by CPC and adopted by the City Council, as submitted or modified, 197-a plans serve as policy guides for subsequent actions by City agencies.

In 1998, Brooklyn Community Board (CB) 1 submitted the Greenpoint 197-a plan, which was officially adopted in January 2002. The plan's study area, as modified by the CPC, is generally coterminous with zip code 11222 and is bound by the East River to the west, Newtown Creek to the north and east, and North 12th Street, Bayard Street, Meeker Avenue, Metropolitan Avenue, Maspeth Avenue, Morgan Avenue, and the Brooklyn-Queens Expressway (BQE) to the south. As shown in **Figure C-5**, the Development Site is located within the Greenpoint 197-a Plan study area, along its southern border.

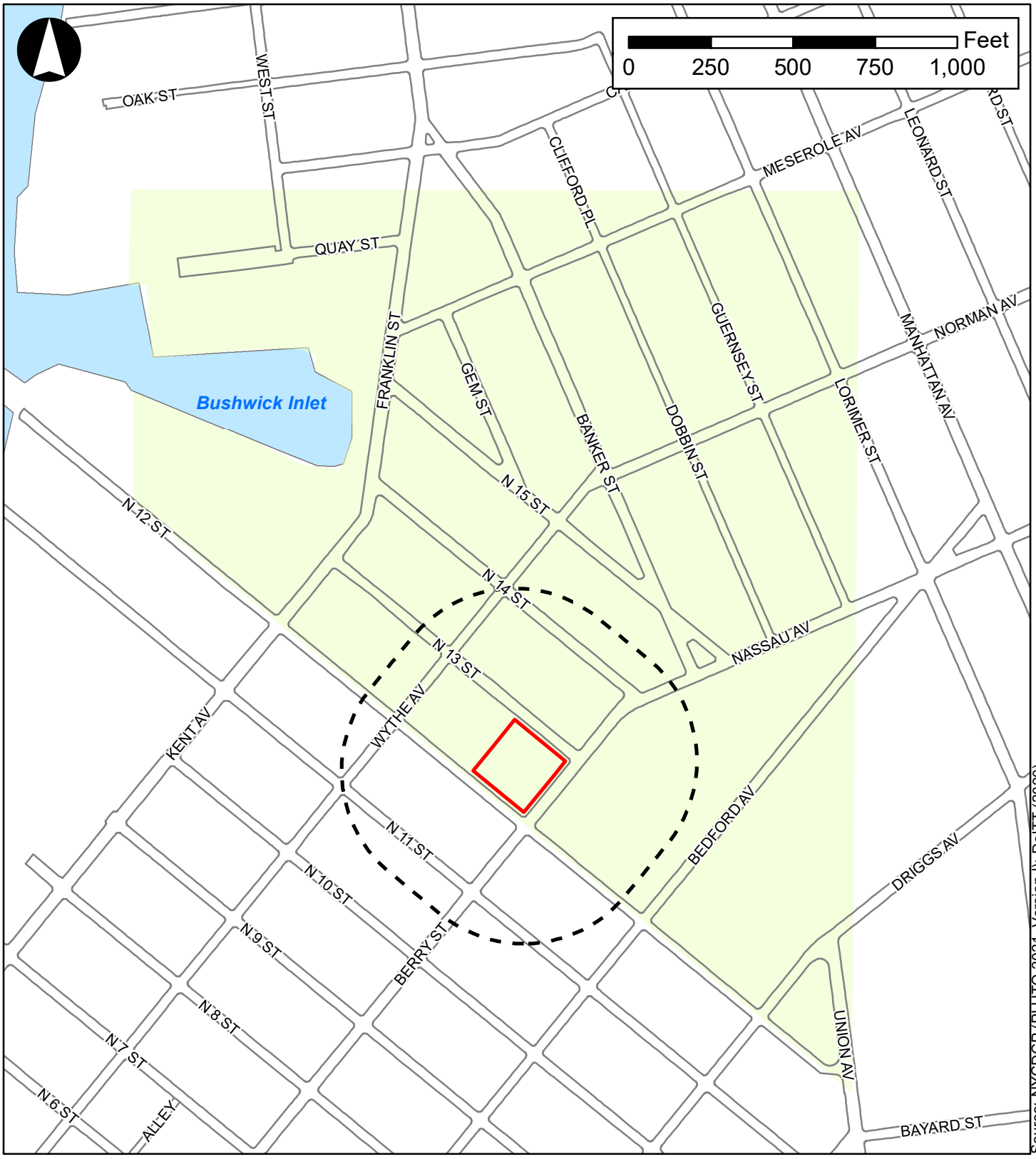
The Greenpoint 197-a Plan was the result of over a decade of effort by residents, community organizations, business leaders, and Brooklyn CB 1 to create a blueprint for future development in Greenpoint, facilitate quality of life improvements in the community, and maximize Greenpoint's potential. The guiding principles of the 197-a Plan were to establish zoning districts that would foster market rate housing, affordable housing, and commercial redevelopment. The plan's recommendations for improving access to the waterfront and redeveloping industrial land into mixed-use residential, manufacturing, and parks were largely addressed in the Greenpoint-Williamsburg Rezoning project. In addition to the waterfront recommendations, the Greenpoint 197-a Plan also calls for the promotion of neighborhood-scale retail development to serve the needs of the local community and maintain a variety of shops and services along the area's retail corridors. It further encourages non-polluting businesses and the creation of economic development programs to retain said non-polluting businesses.

Williamsburg Waterfront 197-a Plan

The Williamsburg Waterfront 197-a Plan (proposed in 1998, and adopted in 2002) focuses on the East River waterfronts of three neighborhoods in the southern portion of Brooklyn CD1: Northside, Southside, and South Williamsburg. The Williamsburg Waterfront 197-a Plan area extends south from Bushwick Inlet Park (North 14th Street) to the point at which the BQE passes the Brooklyn Navy Yard. The area is generally two blocks deep along the waterfront. The planning area extends farther inland at two points to connect to two public open spaces: McCarren Park to the north and Continental Army Plaza at the foot of the Williamsburg Bridge. As shown in **Figure C-6**, the Development Site is located within the Williamsburg Waterfront 197-a Plan, in the northern portion.

The major goals of the Williamsburg Waterfront 197-a Plan include: increasing waterfront access and public open space; encouraging growth along the waterfront consistent with the scale and character of adjacent neighborhoods; fostering mixed-use development in the Northside and Southside and residential developments in South Williamsburg; promoting a clean and safe living and working environment; promoting local economic development that provides jobs and strengthens the residential and retail

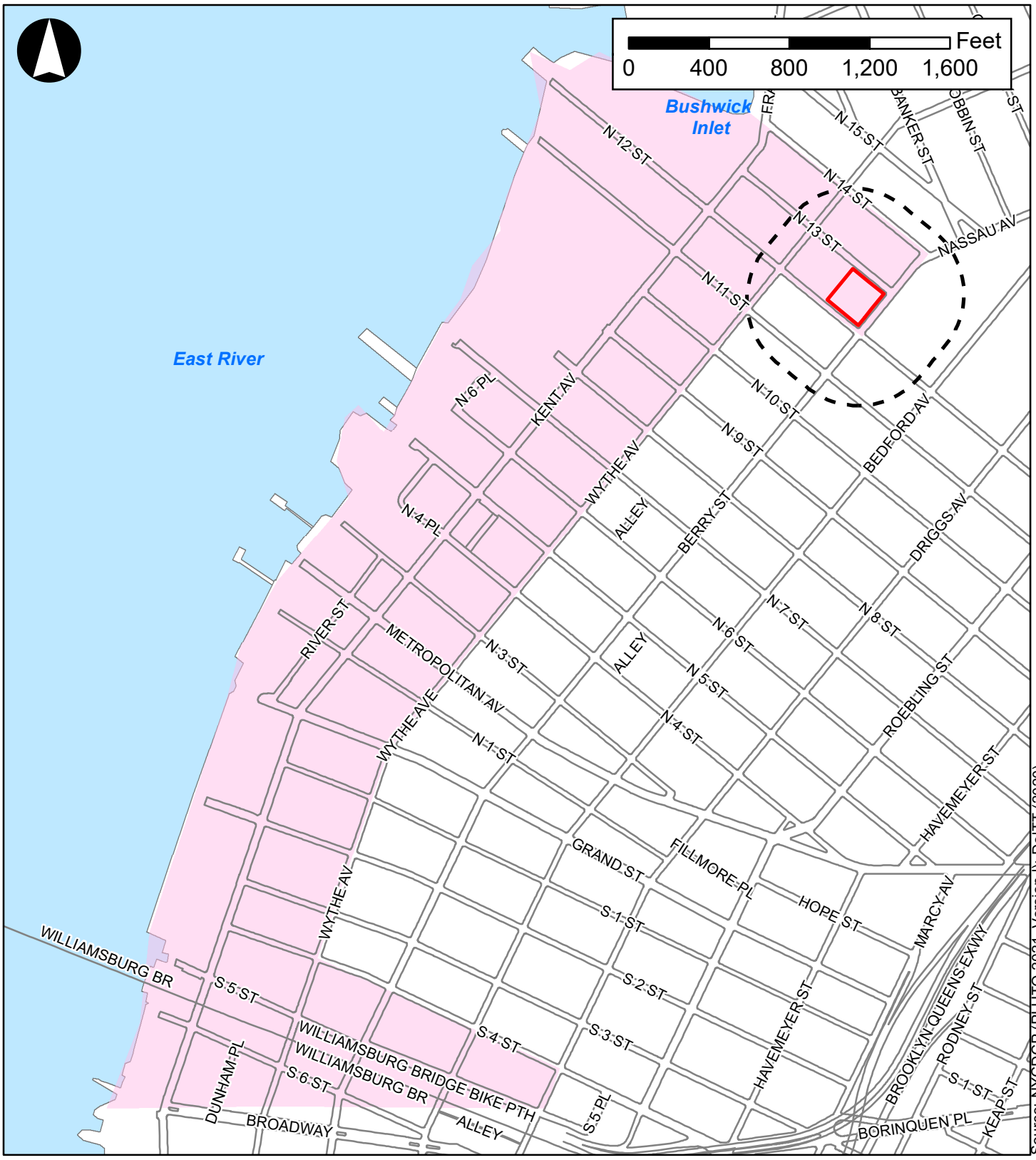
Greenpoint 197-a Plan Area



Legend

- Primary Study Area (Development Site)
- Secondary Study Area (400-Foot Radius)
- Greenpoint 197-a Plan Area

Williamsburg 197-a Plan Area



Legend

- Primary Study Area (Development Site)
- Secondary Study Area (400-Foot Radius)
- Williamsburg 197-a Plan Area

sectors; and supporting and strengthening existing ethnic and income diversity. The plan's recommendations were largely addressed in the Greenpoint-Williamsburg Rezoning project.

North Brooklyn Empire Zone

The Development Site is located within the North Brooklyn Empire Zone (EZ), which includes parts of Greenpoint, Williamsburg, and the Brooklyn Navy Yard (see **Figure C-7**). The New York State EZ program was created in 1986 (originally "Economic Development Zone") and the North Brooklyn EZ was established in 1998. "Area 2" of the North Brooklyn EZ was added in 2006, reflecting the establishment of the Greenpoint-Williamsburg IBZ in that same year. In total, there are eleven Empire Zones in New York City which are administered locally by the New York City Department of Small Business Services (SBS) in partnership with Empire State Development (ESD), New York State's lead economic development agency, and the New York State Departments of Labor and Taxation and Finance.

The New York State EZ program was created to make New York more competitive and stimulate economic growth through incentives designed to attract new businesses to New York State and to enable existing businesses to expand and create more jobs. Specifically, the EZ program encourages development in designated areas by offering an array of incentives in the form of employment, investment, real property, tax credits, and utility discounts. The program is currently closed to new enrollments.

Waterfront Revitalization Program (WRP)

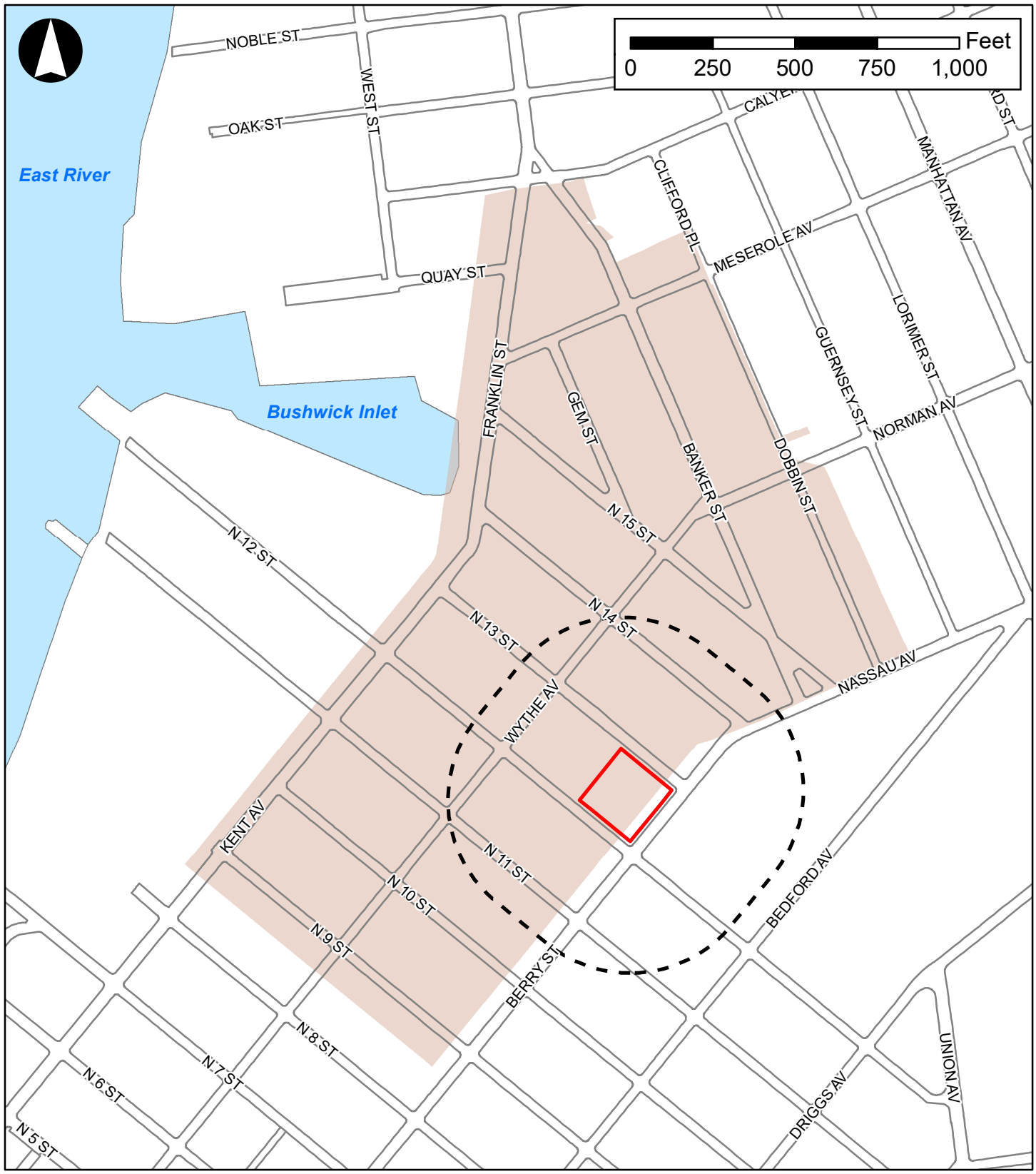
As shown in **Figure C-8**, the Development Site is located within the City's designated coastal zone. Proposed projects that are located within the designated boundaries of New York City's Coastal Zone must be assessed for their consistency with the City's WRP.

Legislative and Regulatory Background

The federal *Coastal Zone Management Act (CZMA)* of 1972 was enacted to support and protect the distinctive character of the waterfront and to set forth standard policies for reviewing proposed development projects along coastlines. The program responded to City, State, and Federal concerns about the deterioration and inappropriate use of the waterfront. In accordance with the *CZMA*, New York State adopted its own *Coastal Management Program (CMP)*, which provides for local implementation when a municipality adopts a local waterfront revitalization program, as is the case in New York City. The New York City WRP is the City's principal coastal zone management tool. The WRP was originally adopted in 1982 and approved by the New York State Department of State (NYSDOS) for inclusion in the New York State CMP. The WRP encourages coordination among all levels of government to promote sound waterfront planning and requires consideration of the program's goals in making land use decisions. NYSDOS administers the program at the State level, and DCP administers it in the City. The WRP was revised and approved by the City Council in October 1999. In August 2002, NYSDOS and federal authorities (i.e., the U.S. Army Corps of Engineers [USACE] and the U.S. Fish and Wildlife Service [USFWS]) adopted the City's ten WRP policies for most of the properties located within its boundaries.

In October 2013, the City Council approved revisions to the WRP in order to proactively advance the long-term goals laid out in *Vision 2020: The New York City Comprehensive Waterfront Plan*, released in 2011. The changes solidify New York City's leadership in the area of sustainability and climate resilience planning making it one of the first major cities in the U.S. to incorporate climate change considerations into its Coastal Zone Management Program. These policies also promote a range of ecological objectives and strategies, facilitate interagency review of permitting to preserve and enhance maritime infrastructure,

North Brooklyn Empire Zone



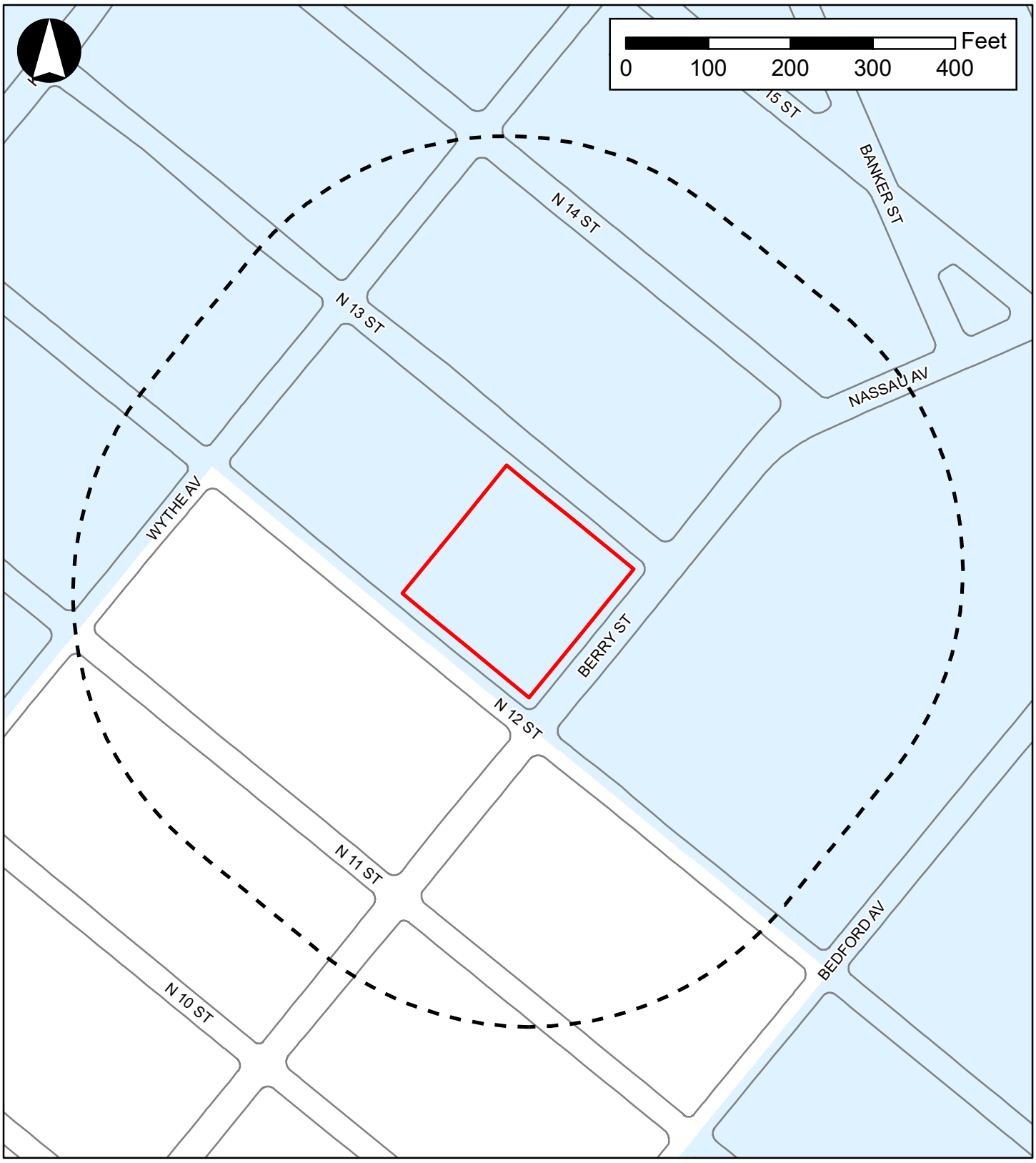
Source: NYCDCP (PLUTO 2021, Version I); DoITT (2020)

Legend

- Primary Study Area (Development Site)
- Secondary Study Area (400-Foot Radius)
- North Brooklyn Empire Zone

Figure C-8

Coastal Zone Boundary (CZB)



Source: NYCDCP (PLUTO 2021, Version I); DoITT (2020)

Legend

- Primary Study Area (Development Site)
- Secondary Study Area (400-Foot Radius)
- Coastal Zone Boundary

and support a thriving, sustainable working waterfront. The New York State Secretary of State approved the revisions to the WRP on February 3, 2016. The U.S. Secretary of Commerce concurred with the State's request to incorporate the WRP into the New York State CMP.

New York City Panel on Climate Change: Projections

In 2013, the New York City Panel on Climate Change (NPCC) released a report named *Climate Risk Information 2013: Observations, Climate Change Projections, and Maps*, which outlined New York City-specific climate change projections to help respond to climate change and accomplish PlaNYC goals. The NPCC report predicted future City temperatures, precipitations, sea levels, and extreme event frequency for the 2020s and 2050s. While the projections will continue to be refined in the future, current projections are useful for present planning purposes and to facilitate decision-making that can reduce existing and near-term risks without impeding the ability to take more informed adaptive actions in the future. Specifically, the NPCC report predicts that mean annual temperatures will increase by 2 to 3˚F and by 4 to 6.5˚F by the 2020s and 2050s, respectively while total annual precipitation will rise by 0 to 10 percent and 5 to 15 percent by the 2020s and 2050s. Furthermore, predictions estimate that sea level will rise by 4 to 11 inches and 11 to 31 inches by the 2020s and 2050s, respectively, and by the 2050s, heat waves and heavy downpours are very likely to become more frequent, more intense, and longer in duration. Coastal flooding is also very likely to increase in frequency, extent, and elevation.

Assessment

As the Development Site lies within the coastal zone, the Proposed Actions must be assessed for its consistency with the policies of the City's WRP. A WRP consistency assessment is provided below. The WRP Consistency Assessment Form is provided in **Appendix II**.

OneNYC 2050: Building a Strong and Fair City

In April 2019, the de Blasio administration released O*neNYC 2050: Building a Strong and Fair City* (*OneNYC 2050*), a strategic plan for inclusive growth and climate action in New York City. Building upon its predecessor, *One New York: The Plan for a Strong and Just City* (OneNYC), *OneNYC 2050* brings new attention to the fundamental link between climate action and inclusive growth with a focus on creating good-paying jobs, ensuring equitable access to natural resources, guaranteeing the right to quality healthcare and education, and promoting justice by recognizing and repairing the damage caused by historic oppression.

OneNYC 2050 includes progress since 2015, saluting the success of *OneNYC*'s growth, sustainability, resiliency, and equity initiatives. However, the plan emphasizes that there is still much to be done to address critical challenges like climate change, increasing unaffordability, and failing infrastructure. The plan's eight goals lay the foundation for transformational change:

- A Vibrant Democracy, where every New Yorker is welcomed into the City's civic and democratic life.

- An Inclusive Economy, where economic growth creates opportunities for New Yorkers and safeguards the American Dream.

- Thriving Neighborhoods, where all communities have safe, affordable housing and are well-served by parks, cultural resources, and other shared spaces.

- Healthy Lives, where health inequities based on race and ethnicity are eliminated, and all residents have equal access to health care, clean air, and healthy food.

- Equity and Excellence in Education, where diverse and fair schools provide a quality education for every student, and New York serves as a model for education children of all backgrounds.

- A Livable Climate, where we no longer rely on fossil fuels and have mitigated the risks posed by climate change.

- Efficient Mobility, where affordable, reliable, safe, and sustainable transportation options mean no New Yorker needs to rely on a car.

- Modern Infrastructure, where reliable physical and digital infrastructure allows New Yorkers to flourish.

OneNYC 2050 articulates a global perspective on the long-term needs of the City and how we must grow responsibly and sustainably while supporting the well-being of all New Yorkers. The plan is referred to as New York City's Green New Deal, and progress reports will be released yearly.

New York Works

In June 2017, Mayor Bill de Blasio released *New York Works*, a 10-year plan to invest in new industries, raise wages, and train New Yorkers for new careers. *New York Works* includes 25 initiatives to spur the creation of 100,000 new jobs in cyber security, freight, life sciences and healthcare, virtual reality, culture, tech, manufacturing, and apprenticeships. As affordability has persisted as an issue for many New Yorkers this plan attempts to identify opportunities to spur job creation for jobs paying more than $50,000 a year, making New York a more affordable place to live and work.

The plan has three objectives: invest in the creation of middle-class jobs; ensure those jobs are accessible to New Yorkers; and prepare for jobs of the future.

IV. FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION CONDITION)

Land Use

Primary Study Area (Development Site)

As discussed in **Attachment A, "Project Description,"** in the future without the Proposed Actions, the No-Action Reasonable Worst Case Development Scenario (RWCDS) is that all structures would remain in their existing condition – one-story warehouse structures, built to the full 1.0 FAR. However, only two of the eight are currently occupied. As such, it is assumed that the six remaining unoccupied buildings would be converted to as-of-right retail uses. Therefore, under No-Action conditions, the Development Site would contain approximately 10,000 gsf of industrial/warehousing space and approximately 30,000 gsf of local

retail space. For photos of the existing buildings that would remain under No-Action conditions, refer to **Figures 6a-6c** of the **EAS Form**.

Secondary Study Area (400-Foot Radius)

There are two projects currently in development within 400 feet of the Development Site and it is anticipated that these projects will be at or near completion in the 2025 Build Year. All of these projects are evidence of an ongoing trend of new commercial development in study area and the broader Greenpoint/Williamsburg neighborhood.

103 North 13th Street

At 103 North 13th Street (Block 2279, Lot 34), a midblock site on the block bound by North 14th Street, Berry Avenue, North 13th Street, and Wythe Avenue, a new seven-story (with cellar), 115-foot tall commercial and industrial building is currently underway. New building permits were initially filed in 2014 for a seven-story, 68-room hotel. The development program was later changed 75,279 gsf to (59,986 zsf) of office, retail, and industrial space, pursuant to an IBIA special permit (see description of IBIA special permit in the following section on No-Action zoning). The development will consist of ground-floor retail, a second floor that will host light manufacturing uses, and the remaining five stories will be used for office space. Other amenities on the site include 142 parking spaces, bicycle storage, and recreational terraces. Construction began in March 2014 and foundation work and building structure were completed but the development was stalled for several years while the owner applied for the IBIA special permit. As this application has since been approved, the completion date is anticipated to be sometime in 2022.

29 Wythe Avenue

The 29 Wythe Avenue (Block 2279, Lot 1) development site is immediately adjacent to 103 North 13th Street. It is an approximately 28,528-sf, L-shaped property that currently contains vacant buildings. The developer is proposing a new seven-story, 110-foot tall building that would contain approximately 214,915 gsf of total space with 125,432 gsf of offices, 23,763 gsf of light industrial use, 12,668 gsf of retail, and 10,113 gsf of tv/music production space. The project also includes 62 accessory parking spaces. This development requires IBIA special permits and the application is being pursued currently. The site is currently undergoing environmental remediation on an as-of-right basis and the anticipated completion date for this project is 2024.

It should be noted that an application for another IBIA is anticipated for a property located at 61 North 11th Street, but, as this application has not been filed as of the writing of this, it is assumed that this project will not be completed by the 2025 Build Year.

Zoning

Primary Study Area (Development Site)

In the future No-Action condition, no zoning changes applicable to the Development Site are anticipated. As such, it is anticipated that the existing M1-1 zoning district would be retained and as-of-right development would take place. Furthermore, the proposed zoning text amendment would not be established in absence of the Proposed Actions.

Secondary Study Area (400-Foot Radius)

There are currently no planned zoning map changes in the 400-foot study area in the future without the Proposed Actions.

Overall, as seen by recently completed and ongoing development projects within the study area and surrounding blocks (i.e., 103 North 13th Street and 29 Wythe Avenue, described above), the land use trend of the Williamsburg-Greenpoint neighborhoods involves more construction of office, retail, and entertainment uses while the neighborhood continues to contain a number of industrial spaces and jobs.

Public Policy

There are no anticipated changes to public policy in the study area in the future without the Proposed Actions.

V. FUTURE WITH THE PROPOSED ACTIONS (WITH-ACTION CONDITION)

Proposed Actions

As detailed in **Attachment A, "Project Description,"** the RWCDS With-Action scenario would be the completion of a ten-story, 135-foot tall (roof height) building with a cellar level and sub-cellar level. The Development Site would have a built FAR of 4.8 and contain 184,561 gsf (151,057 zsf) of commercial uses and 32,990 gsf (32,000 zsf) of Required Industrial Uses (RIUs). The development would have approximately 80 below-grade parking spaces located on the sub-cellar level, accessible via the existing 22-foot-wide curb cut on North 13th Street. Commercial uses would include retail space on the ground floor and cellar level, office space on floors three through nine, and restaurant space on the tenth floor. Manufacturing uses (industrial uses and maker spaces required under the IBIA) would be located on the second and third floor with a dedicated freight elevator connecting to the ground floor loading berths. A 4,800-sf public plaza would front Berry Street with two auxiliary access points on North 12th and North 13th Streets; the public plaza would be flanked by approximately 4,890-sf of PAA space fronting Berry, North 12th, and North 13th streets. The development would have a base height of approximately 46.5 feet after which it would be set back 15 feet along Berry, North 12th, and North 13th streets, and then rise to 135 feet (roof height). Entrances to the cellar level and ground floor retail portions of the Proposed Project would be at various locations along the north side of North 12th Street, the west side of Berry Street, the central public plaza, and the outer court. The industrial, office, and restaurant spaces located on floors two through ten would be accessed through the main lobby via the public passage on the south side of North 13th Street.

Land Use

Primary Study Area (Development Site)

As shown in **Table C-3**, in the future with the Proposed Actions, the Proposed Project would result in the net increase of approximately 154,561 gsf of commercial space (office, retail, restaurant), 22,990 gsf of industrial space, 4,800 sf of public plaza space, 4,890 sf of PAA space, 80 parking spaces, and 112 feet of building height (+9 stories) as compared to the No-Action condition.

The general intention of the IBIA regulations is to encourage the development of new buildings designed to cater to the growing office sectors and to provide protected space for small-scale light industrial uses. This is done with the overall goal of fostering job creation in Brooklyn CD 1. Establishing an IBIA would also encourage job creation, provide increased walk-to-work opportunities, encourage increased density of appropriate land uses, strengthen the economic base of the City, conserve the value of land, contribute to a diverse mix of business uses and employment in the area, and protect the City's tax revenues. Refer to **Attachment A, Section IV, "Purpose and Needs of the Proposed Actions,"** for more information.

Table C-3: Comparison of No-Action and With-Action Scenarios

Land Use	No-Action[1]	With-Action[2]	Increment
Industrial[3]	10,000 gsf	32,990 gsf	+22,990 gsf
Office	-	124,224 gsf	+124,224 gsf
Retail	30,000 gsf	47,171 gsf	+17,171 gsf
Restaurant	-	13,166 gsf	+13,166 gsf
Public Plaza	-	4,800 sf	+4,800 sf
PAA	-	4,890 sf	+4,890 sf
Below-grade Parking & Mechanical	-	65,882 gsf	+65,882 gsf
Total	**40,000 gsf**	**283,433 gsf**	**+243,433 gsf**
Parking Spaces	0 spaces	80 spaces	+80
Loading Berths	7	2	-6
Streetwall height	23 feet	55 feet	+32 feet
Building height (roof)	23 feet	135 feet	+112 feet
Building stories	1 story	10 stories	+9 stories
Below-grade	-	2 levels	+2 levels
Population	**No-Action**	**With-Action**	**Increment**
Employees[4]	100	714	+614

Notes:
[1] As described in Attachment A, "Projected Description," under No-Action conditions, the six existing unoccupied buildings in the Development Site are expected to be converted to retail, whereas two existing buildings would continue to be occupied by warehouse/light industrial uses.
[2] The With-Action scenario is consistent with the Applicant's special permit application plans.
[3] The With-Action scenario industrial space would be a Required Industrial Use that would be protected and subject to enforcement/reporting requirements and could not be converted to office use, unlike conventional industrial space.
[4] See EAS Form for employee generation rates.

Secondary Study Area (400-Foot Radius)

As noted above in the descriptions of existing and No-Action conditions, the study area and nearby blocks have been experiencing a trend of changing land uses that are expected to continue in the future. These changes are evidenced by existing commercial uses, like retail, bars, and restaurants, the William Vale and Wythe hotels, and the 25 Kent Avenue, 103 North 13th Street and 29 Wythe Avenue IBIAs. No additional changes to land use are anticipated within the 400-foot study area because of the Proposed Actions, as ongoing trends would be expected to continue with or without the Proposed Actions.

Assessment

The Proposed Actions would not result in significant adverse impacts to land use on the Development Site, within the Development Site, or in the secondary study area. The Proposed Actions would allow new commercial (office, retail, and restaurant) and light industrial development on the Development Site in an area where there is a strong demand for these particular uses. While Proposed Actions would permit similar uses as compared to those permitted as-of-right, the Proposed Actions would allow for higher commercial and industrial density as compared to No-Action conditions (i.e., 283,433 gsf of industrial, commercial office and retail, and accessory parking space would be generated as part of the Proposed

Project, as compared to 40,000 gsf of light industrial and retail uses under No-Action conditions). Such uses and densities are considered compatible for this area as reflected in the existing zoning and the creation of nearby IBIAs at 25 Kent Avenue, 103 North 13th Street, 29 Wythe Avenue, and 12 Franklin Street. The Proposed Actions would also result in the provision of up to 9,690 sf of PAA space, which would not be developed absent the Proposed Actions. Additionally, the Proposed Project would support light industrial/manufacturing uses in an existing IBZ. Furthermore, the Proposed Project would be built at a density and bulk compatible with the other properties in the area, such as nearby 25 Kent Avenue (6.06 FAR), 103 North 13th Street (5.50 FAR), 150 North 12th Street (4.61 FAR), and 34 Berry Street (4.15 FAR). As such, the Proposed Actions would result in development that would complement the land use character of the secondary study area as a whole.

Zoning

The Proposed Actions consist of a series of discretionary approvals: (i) a zoning map amendment, which would rezone the proposed rezoning area from M1-1 to M1-2; (ii) a zoning text amendment, which would establish a new IBIA coterminous with the Development Site; (iii) a special permit to increase the FAR by providing required industrial land use and modifications to public plaza requirements; (iv) a special permit allowing waiver of accessory parking and modification of loading berth requirements; and (v) by designating the Development Site as an IBIA, the Zoning Text Amendment would make existing special permits, allowed only in IBIAs, available on the Development Site. Refer to **Attachment A, Section III, "Description of Proposed Actions,"** for a detailed description.

Application of IBIAs Elsewhere

As shown in **Figure C-9**, the IBIA designation currently applies to Brooklyn Blocks 2282, 2279, 2641, and 2614 (25 Kent Avenue, 103 North 13th Street, 1 Wythe Avenue, and 12 Franklin Street, respectively). There is also an IBIA located on Queens Block 461, Lot 16 (42-11 9th Street). The Proposed Actions would amend ZR § 74-96 (Industrial Business Incentive Areas specified) to designate the Development Site as an IBIA.

Compliance with ZR § 74-96 Conditions

As indicated above, a number of conditions have to be satisfied by the Proposed Project for CPC approval of the modification of use, bulk, parking, and loading regulations in IBIA. As discussed below, the Proposed Project would satisfy the stated conditions.

Minimum Amount of Required Industrial Uses (RIUs)

The Proposed Project would provide 32,990 gsf (32,000 zsf) of floor area (0.80 FAR) for the RIUs on the second and third floors which would have 16-foot slab-to-slab heights and 15-foot finished ceilings. By doing so, the development is permitted to provide additional commercial floor area (incentive uses) beyond the allowed base of 2.0 commercial FAR (under the proposed M1-2 district) at a rate of 3.5 sf of commercial space to 1 sf of RIU resulting in a maximum overall built FAR of 4.8. As such, the Proposed Project would include approximately 184,561 gsf (151,057 zsf) of commercial floor area (3.8 FAR), of which approximately 83,630 gsf (80,000 zsf) would be comprised of commercial incentive uses (2.0 FAR). A dedicated freight elevator would connect the ground-floor loading berths to the second- and third-floor RIU space, and would be sufficient to handle the loading requirements of the Proposed Project.

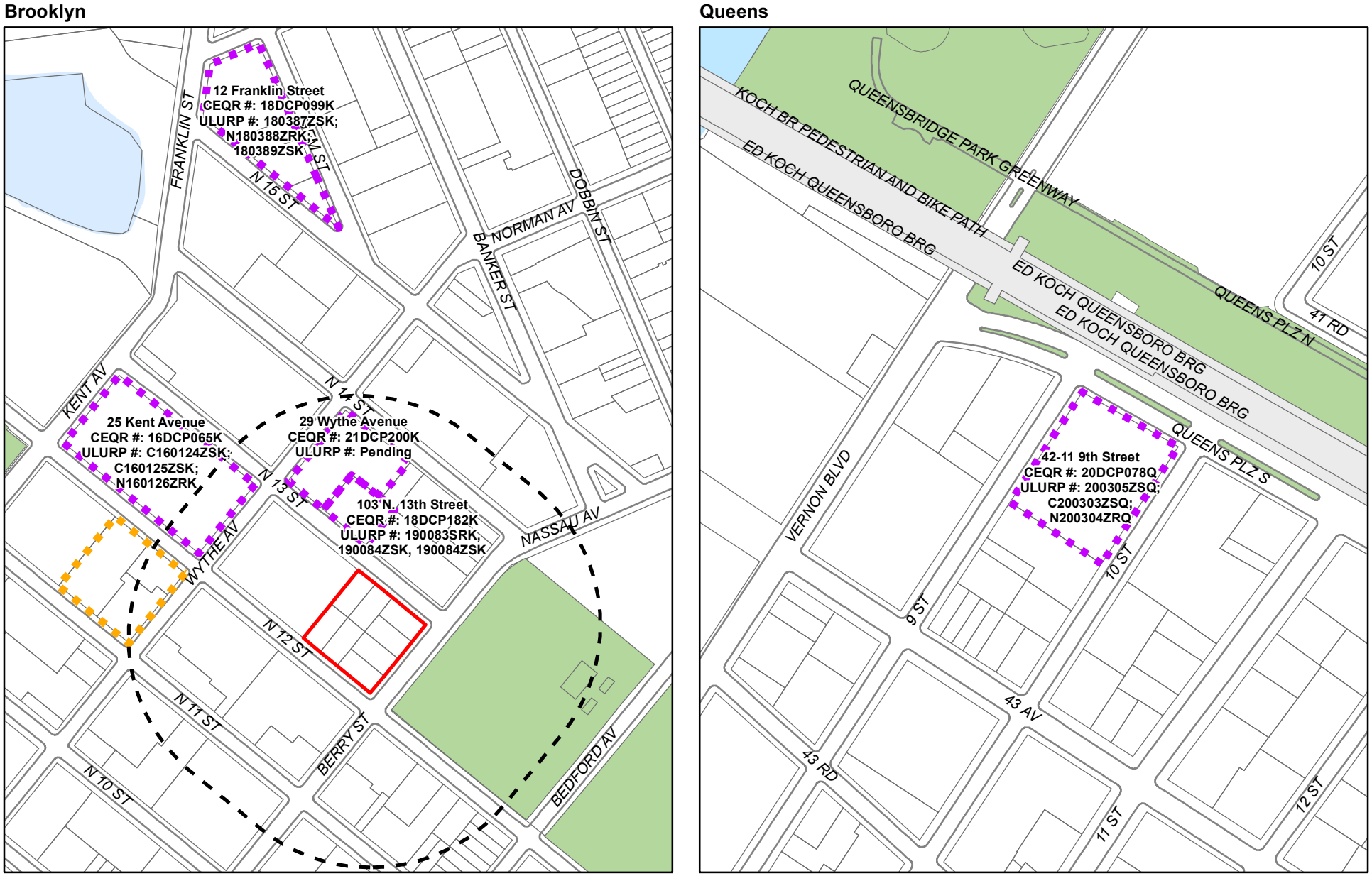


Figure C-9
IBIA-Designated Areas

Minimum Sidewalk Width

The Proposed Project would have a sidewalk with a minimum width of 15 feet around the entire frontage of the zoning lot. The sidewalk would be improved according to NYC Department of Transportation standards, would be at the same level as any adjoining public sidewalk, and would be publicly accessible at all times.

Height and Setback

The expansion would have a roughly 50-foot tall streetwall facing North 12th, Berry, and 13th Streets and the building volume would be set back 15 feet before reaching the 135-foot tall roof height. As such, the development would comply with all height and setback required conditions.

Ground Floor Design

The Proposed Project would provide approximately 675 sf of transparent materials over the total 51,115 sf of street wall subject to this requirement, representing 59 percent of the surface area between a height of two-feet above the level of the adjoining sidewalk and a height of 12-feet above the level of the first finished floor above the curb level. As such, it would comply with all applicable glazing requirement governed by ZR § 74-96.

Signage

All signage at the Proposed Project would comply with the signage regulations applicable in M1-2 zoning districts as set forth in ZR § 32-60, inclusive. In addition, the Proposed Project would have an exterior sign identifying it as subject IBIA regulations with the required information.

Compliance with the Required ZR § 74-96 Findings

As indicated above, a number of findings must be satisfied by the Proposed Project for CPC approval for the modification of use, bulk, parking and loading regulations in IBIAs. As described in detail in the ULURP application and as discussed below, the Proposed Project would meet all of the required findings.

Promote a Beneficial Mix of Required Industrial and Incentive Uses

The proposed special permit would facilitate the development of a ten-story, 283,433-gsf mixed-used development which would include approximately:

- 184,561 gsf (151,057 zsf) of commercial floor area (3.8 FAR) containing approximately 47,171 gsf (20,488 zsf) of retail space (including approximately 23,799 gsf below grade retail), 13,166 gsf (12,518 zsf) of restaurant space, and 124,224 gsf (118,051 zsf) of office space;
- 32,990 gsf (32,000 zsf) of industrial floor area (0.8 FAR) on the second and third floor; and
- 65,882 gsf (8,042 zsf) of parking and mechanical floor area (0.20 FAR) on the ground floor, cellar, and sub-cellar levels.

The industrial floor area would contain approximately 32,000 zsf (0.8 FAR) of contiguous space for the RIUs which would have 16-foot slab-to-slab heights and 15-foot finished ceilings, two passenger elevator banks, a dedicated freight elevator, and serviced by two loading berths along North 13th Street.

The above mix of commercial and industrial space allowed by the proposed special permit would benefit the area as the Proposed Project would help retain the industrial character of the neighborhood by providing space dedicated exclusively to industrial uses. The Proposed Project would respond to the significant demand for Class A office space in Brooklyn and would create jobs within walking distance of the residential portions of the surrounding Williamsburg and Greenpoint neighborhoods. The proposed retail and restaurant space would complement development trends in the area, like construction of new hotels, retail, and entertainment uses.

With the mix of spaces available, the Proposed Project has the potential to accommodate businesses that have needs for a mix of industrial, office, and commercial spaces. Together, the RIUs and the Incentive Uses would create new commercial and industrial jobs, increasing employment opportunities and enhancing the mixed-use character of the area.

Result in Superior Site Planning, Harmonious Urban Design Relationships and a Safe and Enjoyable Streetscape

The Proposed Development is designed to relate harmoniously to the scale and materiality of the surrounding blocks of the Greenpoint and Williamsburg neighborhoods. The two neighborhoods' industrial heritage has inspired the material palette and the massing of the Proposed Project. Its design critically reinterprets elements of warehouse and manufacturing building typologies in service of the intended program of light industrial and modern commercial office uses. The Proposed Project incorporates aspects of the historic streetscape into the emerging neighborhood character with the use of masonry screening and detailing of the local retail storefronts. The use of transparent materials at the ground floor would enhance the pedestrian experience along each of the three street frontages and serve to highlight the Proposed Project's local retail storefronts. Transparency of the façades would continue above the ground floor to highlight several portions of the Proposed Project's uppermost floors (the ninth through tenth floors) located on all three of the Development Site's street frontages. In addition, the Proposed Project includes multiple recessed terraces and a prominent corner façade at North 13th Street and Berry Street that would create visual interest from the adjacent street frontages.

The authorization of the special permit would result in a safe and enjoyable streetscape adjacent to the Development Site. The Proposed Project would maximize the amount and visibility of local retail uses on each of the three street frontages as the local retail uses would have large, street facing entrances and windows. In addition, the Proposed Project would remove the existing curb cuts along North 12th and Berry Streets, and the Proposed Project's loading berths and parking garage would be served by the two existing, approximately 22-foot-wide curb cuts along North 13th Street, minimizing the effects of vehicle activity on pedestrians along the public sidewalks.

Will Result in a Building that has a Better Design Relationship with Surrounding Streets and Adjacent Open Areas

The proposed special permits would allow construction of a building that has a more thoughtful design than the existing structure which would be consistent with the surrounding streets and adjacent open areas. The Proposed Project would infill an underbuilt site with a contextual building pursuant to ZR § 74-96. The Proposed Project's roof height, 135 feet, would be within the range of the area's built environment

and consistent with the developments in the area, such as the eight-story 135-foot tall development at 25 Kent Avenue and the 22-story, 250-foot tall William Vale Hotel adjacent to the Proposed Project Site.

Will Result in a Development or Enlargement that Will Not Have an Adverse Effect on the Surrounding Neighborhood

The Proposed Project would have a beneficial impact on the surrounding neighborhood. Consistent with the policy goals of the Greenpoint-Williamsburg IBZ, the construction of new, high-quality commercial (office, retail, and restaurant) and industrial space would grow the industrial sector in the neighborhood. It would help satisfy a market need for commercial office space in the area. Additionally, it would foster a mix of uses in the neighborhood that would complement the recent developments of hotel, retail, and entertainment uses in the surrounding area. Furthermore, the Proposed Project would create a significant number of permanent new jobs in an area with close proximity to residential neighborhoods.

In addition to the benefits from the occupancy of the Proposed Project, the scale of the Proposed Project would be in context with the surrounding Greenpoint and Williamsburg neighborhoods. The proposed building height of 135-feet would not be atypical and would not adversely impact buildings adjacent to the Proposed Project on either North 13th Street or North 14th Street. The proposed building height is within the building height range of the surrounding built environment, including the eight-story, 135-feet tall development located at 25 Kent Avenue, the seven-story, 109.5-feet tall development located at 103 North 13th Street, and the 22-story, 250-feet tall William Vale development located adjacent to the Development Site. Moreover, this EAS demonstrates that the Proposed Project would not have an adverse effect on the surrounding Greenpoint and Williamsburg neighborhoods.

Compliance with the Required ZR § 74-966 Findings to Modify Publicly Accessible Open Space Requirements in Industrial Business Incentive Areas

As indicated in ZR § 74-964, where a publicly accessible open space is provided pursuant to ZR § 74-965, the CPC may modify the provisions as set forth in ZR § 37-70 (Public Plazas), provided that the public plaza serve the following specific purposes:

- To serve a variety of users of the public plaza area;
- To provide spaces for solitary users while at the same time providing opportunities for social interaction for small groups; and
- To provide safe spaces, with maximum visibility from the street and adjacent buildings and with multiple avenues for ingress and egress.

The approximately 9,690-sf PAA space would front Berry Street with two auxiliary access points on North 12th and North 13th Streets. The PAA space would be comprised of a 4,800-sf public plaza within the central portion of the PAA space, which qualifies the Proposed Project for a 25-foot building height bonus, whereas the remainder of the open space would comprise of 4,890-sf of general PAA space (which does not generate a bonus but will be improved with amenities and available to the public). While the design is not finalized it is anticipated that the public plaza portion of the PAA space would provide café-style tables and chairs, bicycle parking, and plantings.

Compliance with the Required ZR § 74-966 Findings to Modify Parking and Loading Requirements in Industrial Business Incentive Areas

As indicated in ZR § 74-964, the CPC may reduce or waive the off-street parking requirements set forth in ZR § 44-20 (Required Accessory Off-Street Parking Spaces for Manufacturing, Commercial or Community Facility Uses), not including bicycle parking, and may also reduce or waive the loading berth requirements as set forth in ZR § 44-50 (General Purposes), provided that the following findings are satisfied:

- *Such Reduction or Waiver Will Not Create or Contribute to Serious Traffic Congestion and Will Not Unduly Inhibit Vehicular and Pedestrian Movement*

  According to the 2021 *CEQR Technical Manual* guidelines, if a proposed project is expected to result in fewer than 50 vehicle trips, 200 peak hour transit trips, and 200 peak hour pedestrian trips, further quantified analyses are not warranted as no significant adverse impacts are expected. As detailed in the travel demand forecast provided in **"Attachment H, Transportation,"** the Proposed Project would generate approximately 87, 98, 105, and 104 incremental vehicle trips (combined in and out) during the weekday AM, midday, PM, and Saturday peak hours, respectively. Although the incremental vehicle trips generated by the Proposed Project would exceed the *CEQR Technical Manual* threshold of 50 vehicle trips during any weekday or Saturday peak hour, no intersection is expected to experience an increase of 50 or more vehicles during any of the peak hours (see **Attachment H** for details). Therefore, no significant impacts are expected, and a detailed traffic analysis is not warranted. As such, the proposed reduction in required parking spaces and loading berths would not contribute to serious traffic congestion.

  Additionally, the Proposed Project would generate an incremental increase of 148, 68, 158, and 83 subway trips (in and out combined) during the weekday AM, midday, PM, and Saturday midday peak periods. Likewise, the development would generate an incremental increase of 24, 66, 46, and 48 bus trips during the weekday AM, midday, PM, and Saturday midday peak hours. The Proposed Project would also generate an incremental increase of approximately 8, 0, 6, and 2 ferry trips during the same peak hours, respectively. As the *CEQR Technical Manual* transit thresholds are not met in any of the four analyzed peak hours, detailed transit analyses are not warranted as no significant adverse transit impacts are expected.

  Lastly, the Proposed Project would generate an incremental increase of 170, 477, 309, and 630 walk-only trips (in and out combined) during the weekday AM, midday, PM, and Saturday peak periods, respectively. In addition to these walk-only trips, subway or bus trips, or vehicle trips originating/terminating at a nearby off-site parking facility, would also include walk portions of the trip. Therefore, the Proposed Project would generate a total of 364, 690, 576, and 874 walk trips in the weekday AM, midday, PM and Saturday peak periods. Although the total walk trips would exceed the CEQR threshold during any analysis period, as detailed in **Attachment H**, no significant adverse pedestrian impacts are expected as a result of the Proposed Actions.

  The Proposed Project would contain approximately 40,000 sf of self-parking (80 spaces) which would be located in the sub-cellar level. Access and egress would be provided from an existing, 22-foot-wide curb cut along North 13th Street. Without the parking waiver modification enabled by the Proposed Actions, the site would be required to provide roughly 724 accessory parking spaces as required by M1-2 zoning. By substantially decreasing the required parking, the proposed

waiver could reduce the number of vehicles driving to the Development Site which would help to curb potential traffic congestion.

Traffic congestion would also be curbed by the ample selection of other modes of transportation in the area. The Citi Bike station that is located on the corner of North 12th Street and Bedford Avenue would facilitate cycling as a mode of transportation. In addition, there are bike lanes located on North 12th Street, Berry Street, and Wythe Avenue. The Nassau Avenue G subway station is located approximately 0.3 miles northeast of the Development Site at the intersection of Manhattan and Nassau Avenues and the Bedford Avenue L subway station is located approximately 0.4 miles southeast from the Development Site at the intersection of Bedford Avenue and North 7th Street. In addition, bus routes serving the area include the B32 (connecting Williamsburg Bridge Plaza and Long Island City), which runs along Kent and Wythe avenues, and the B62 (connecting Downtown Brooklyn/Fulton Mall and Long Island City), which runs along Bedford and Driggs Avenues.

- *The Number of Curb Cuts Provided are the Minimum Required for Adequate Access to Off-Street Parking and Loading Berths, and Such Curb Cuts are Located so as to Cause Minimum Disruption to Traffic, Including Vehicular, Bicycle and Pedestrian Circulation Patterns*

  The two existing, 22-foot-wide curb cuts provided fulfills the minimum requirement for adequate access to the loading berths and below-grade parking garage. The two curb cuts are located on the northern portion of the Development Site along North 13th Street so as to cause minimum disruption to traffic, while still allowing for efficient placement of the stairwell and passenger elevator core serving the upper floors. The location of the curb cut on the northern portion of the Development Site along North 23th Street prevents disruption to traffic flow as it is located midblock farther away from any busy intersection.

- *The Streets Providing Access to the Development or Enlargement are Adequate to Handle the Traffic Generated Thereby, or Provision Has Been Made to Handle Such Traffic*

  It is anticipated that a majority of occupants and visitors to the Development Site would either walk, bike, or use public transit. As described in **Attachment H, "Transportation**," it is anticipated the majority of trips would be by public transit and walking. In addition, traffic generated by the 80 parking spaces provided at the Development Site would not create or contribute to serious congestion. The roadway network surrounding the Development Site is a local street grid containing mostly one-way streets typically 60 feet in width, and the density and consistency of the grid provide adequate access for the relatively low traffic volumes generated by the Proposed Project.

- *The Reduction or Waiver of Loading Berths Will Not Create or Contribute to Serious Traffic Congestion or Unduly Inhibit Vehicular and Pedestrian Movement*

  The Applicant proposes to provide two off-street loading berths for the Proposed Project, which is less than the three berths that would be required pursuant to ZR § 44-52. As the proposed RIUs occupy more than 10,000 square feet of floor area, the loading berths required by the RIUs would be at least 50 feet deep by 12 feet wide, as required pursuant to ZR § 44-581.[2]

[2] The second loading berth is proposed to be approximately 33 feet deep and 12 feet wide.

The reduction in the required number of loading berths provided in the Proposed Project would not create or contribute to serious traffic congestion or unduly inhibit vehicular or pedestrian movement. Although the Applicant does not anticipate a demand for more than three loading berths in the Proposed Project, the street grid surrounding the Development Site is sufficient to handle any additional traffic generated by loading and unloading at the Development Site. The retail and office uses in the Proposed Project would generate a relatively low off-street loading demand, if at all, as deliveries are expected to arrive via parcel delivery services such as USPS, FedEx, or UPS, as opposed to larger deliveries that would require a loading berth. Moreover, the deliveries would primarily consist of curbside deliveries. As is typical throughout the city, it is anticipated that curbside deliveries would be scheduled during off-peak hours (e.g., in the early morning (before 9am), in the late morning (after 9am), and in the afternoon (before 5pm)) as to not interfere with peak work travel and shopping times and to avoid peak traffic periods. In addition, it is anticipated that these deliveries would be concentrated along the North 13th Street frontage of the Development Site near the entrance to office uses and the freight elevators. The existing parking regulation along the North 13th Street frontage is "No Parking, Monday-Friday, 8am-6pm," which is supportive of curbside loading. This regulation permits the loading and unloading of packages or merchandise, as well as the expeditious drop-off and pick-up of passengers.

The RIUs on the second and third stories of the Proposed Project are expected to use the berths for loading and unloading of raw materials, equipment, and finished products. Similar to the retail and office uses, the RIUs are anticipated to receive shipments throughout the morning and afternoon. Deliveries are anticipated to be staggered over the course of the day, with a typical stay in a loading berth being less than thirty minutes. Staggering of loading activities would ensure that each use could load and unload without creating or contributing to traffic congestion or inhibiting vehicular and pedestrian movement. In addition, the existing parking regulations would support curbside deliveries if the need arise.

As the Proposed Project would satisfy all applicable conditions required for the proposed special permits, the Proposed Project complies with the requirements of ZR § 74-966.

Primary Study Area (Development Site)

The proposed zoning text amendment would apply the special IBIA regulations to the Development Site, which would allow the Applicant to seek the two IBIA special permits intended to facilitate the development of a new building with a mix of commercial and light industrial uses on Block 2283, Lots 25, 28, 31, 33, 35, 38, 41 and 43. Reflecting the City's intent when it created IBIA regulations, the purpose of the Proposed Actions is to achieve a series of outcomes, including job creation, walk-to-work opportunities, increased density of appropriate land uses, strengthened economic base of the City, conservation of land value, protection of tax revenues, and contribution of a diverse mix of business uses and employment in the area.

Secondary Study Area (400-Foot Radius)

No changes to zoning are anticipated within the 400-foot study area because of the Proposed Actions aside from those affecting the Development Site.

Assessment

The Proposed Actions would not result in any significant adverse impacts to zoning on the Development Site or in the 400-foot study area. The Proposed Actions would designate the Development Site as part of the IBIA, applying an alternate set of zoning regulations that the City has established in the ZR as appropriate for M1-2 zoned areas in this part of the City. IBIA regulations apply in cases where a property owner seeks special permit(s) approval to facilitate a development under the IBIA regulations. These regulations increase permitted commercial and manufacturing FAR from 2.0 to 4.8, the same FAR permitted for community facilities, subject to various conditions intended to result in a development considered desirable by the City. Specifically, the Proposed Actions would result in a built FAR of 4.8 (including 3.8 FAR of commercial uses, 0.8 FAR of industrial uses, and 0.2 FAR of parking uses) compared to a built FAR of 1.0 absent the Proposed Actions (which would include 0.75 FAR of industrial uses and 0.25 FAR of commercial uses). While building height and setbacks of the as-of-right development would be regulated by the *sky exposure plane* after an initial maximum base height of 30 feet, the existing structures at the Development Site would remain at a height of approximately 20-feet; by comparison, the Proposed Project would rise to a base height of 46'-6" before rising to a maximum building height of 135-feet (after an initial setback of 15-feet along the Development Site's Berry, North 12th, and North 13th Street frontages). As outlined above, the Proposed Project would meet the required conditions and address the special permit requirements. As such, the Proposed Actions, consisting of a requested zoning map amendment, zoning text amendment, and special permits, would be consistent with zoning in the secondary study area and greater Williamsburg-Greenpoint neihborhoods, specifically with the IBIA regulations. In terms of the effect of the Proposed Actions on the secondary study area, the establishment of another IBIA designated area would be compatible with the existing IBIA areas mapped near the Development Site (refer to **Figure C-9**). The Proposed Actions would also reinforce the presence of viable commercial and light industrial uses and would not introduce uses that may conflict with existing or future commercial and light industrial uses in portions of the study area where such uses are permitted. Furthermore, the Proposed Actions are compatible with other City initiatives, such as the recently adopted M1 hotel special permit proposal, in maintaining a diverse mix of non-residential uses, such as light industrial uses, in the City's M1 districts. Accordingly, the Proposed Actions would not result in any significant adverse zoning impacts.

Public Policy

As discussed under "Existing Conditions," the Development Site and the secondary study area fall within the geographic jurisdiction of several public policies. These policies include the *Greenpoint-Williamsburg IBZ*, the *Greenpoint 197-a Plan*, the *Williamsburg Waterfront 197-a Plan*, the *WRP*, and *OneNYC*. Policy assessments of each of these are provided below.

Greenpoint-Williamsburg IBZ

The Proposed Actions would be consistent with the purpose of the IBZ program in that they would facilitate the creation of 32,990 gsf (32,000 zsf) of light industrial space that would be designated as RIU. As such, use of this space would be limited to certain light industrial/manufacturing activities identified under the IBIA. Under the No-Action scenario, the existing industrial space would not be subject to any protections under the site's existing zoning and could be converted into a range of commercial or community facility uses on an as-of-right basis. As such, the Proposed Actions would offer protection for industrial space that would not be provided under No-Action conditions, promoting the continued long-term presence of industrial uses in the IBZ. In addition, residential uses would continue to be prohibited.

The IBIA program would provide property owners greater flexibility to provide commercial uses and receive a return on investment in construction and maintenance, thus reducing the likelihood of successfully receiving zoning variances to approve residential uses in the future.

Williamsburg Waterfront and Greenpoint 197-a Plans

The Proposed Actions are consistent with the general purpose of both the *Williamsburg Waterfront 197-a* and the *Greenpoint 197-a* plans in that they would promote applicable plan goals. For both plans, the Proposed Actions would facilitate quality of life improvements in the community and would maximize Williamsburg's and Greenpoint's potential by enabling the redevelopment of a previously underutilized site with a combination of commercial and industrial uses. Additionally, the Proposed Actions would promote economic development in the neighborhood by creating a range of commercial and industrial jobs in a non-residential area that is located within walking distance of existing residential and retail uses.

North Brooklyn Empire Zone

The Proposed Actions are consistent with the general purpose and goals of the North Brooklyn EZ as the Proposed Actions would generate new, state-of-the-art commercial office, retail, and industrial space within the North Brooklyn EZ. The Proposed Project's commercial and industrial uses would be in line with the North Brooklyn EZ's goal of stimulating economic growth to attract new businesses to New York State and enabling existing businesses to expand and create more jobs.

WRP Consistency Assessment

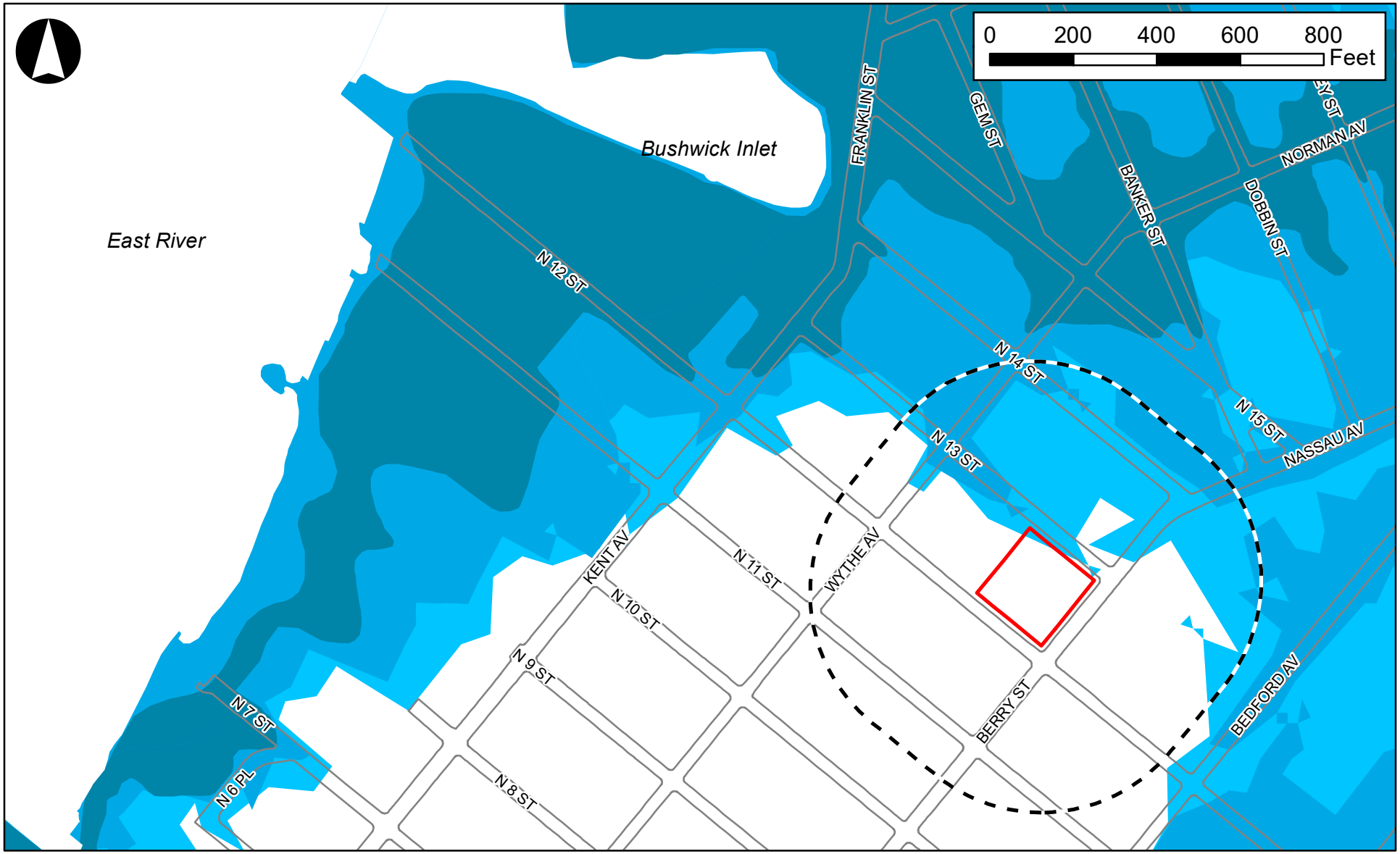
As the Development Site is located within the City's designated Coastal Zone, the Proposed Actions are subject to review for consistency with the policies of the WRP, designed to maximize the benefits derived from economic development, environmental preservation, and public use of the waterfront, while minimizing the conflicts among those objectives. The WRP Consistency Assessment Form (CAF) lists the WRP policies and indicates whether the Proposed Actions would promote or hinder that policy or if that policy would not be applicable (see **Appendix II**).

Per the WRP CAF, Policies 1, 1.1, and 1.3 warrant further assessment and are addressed below. Regarding an assessment of Policy 6.2, as shown in **Figures C-10 and C-11**, the Development Site is not located within the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (PFIRM) 100-year (1%) or 500-year (0.2%) annual chance floodplains. However, a portion of the Development Site is expected to fall within the projected 100-year floodplain by 2050 and the entirety of the site is expected to fall within the 500-year floodplain by 2050. It should be noted though, the NPCC recommends that these projections not be used to judge site-specific risks and the projections are subject to change. Therefore, an assessment of Policy 6.2 is not warranted.

Consistency with Applicable WRP Policies

Policy 1: Support and facilitate commercial and residential redevelopment in areas well-suited to such development.

Although located in the coastal zone, the Development Site is not a waterfront site as it is located two blocks upland and is therefore considered an upland site. It is well suited for light industrial, office, and retail development, is located in the IBZ, and is underbuilt relative to nearby lots. The area is well served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BEDFORD AV
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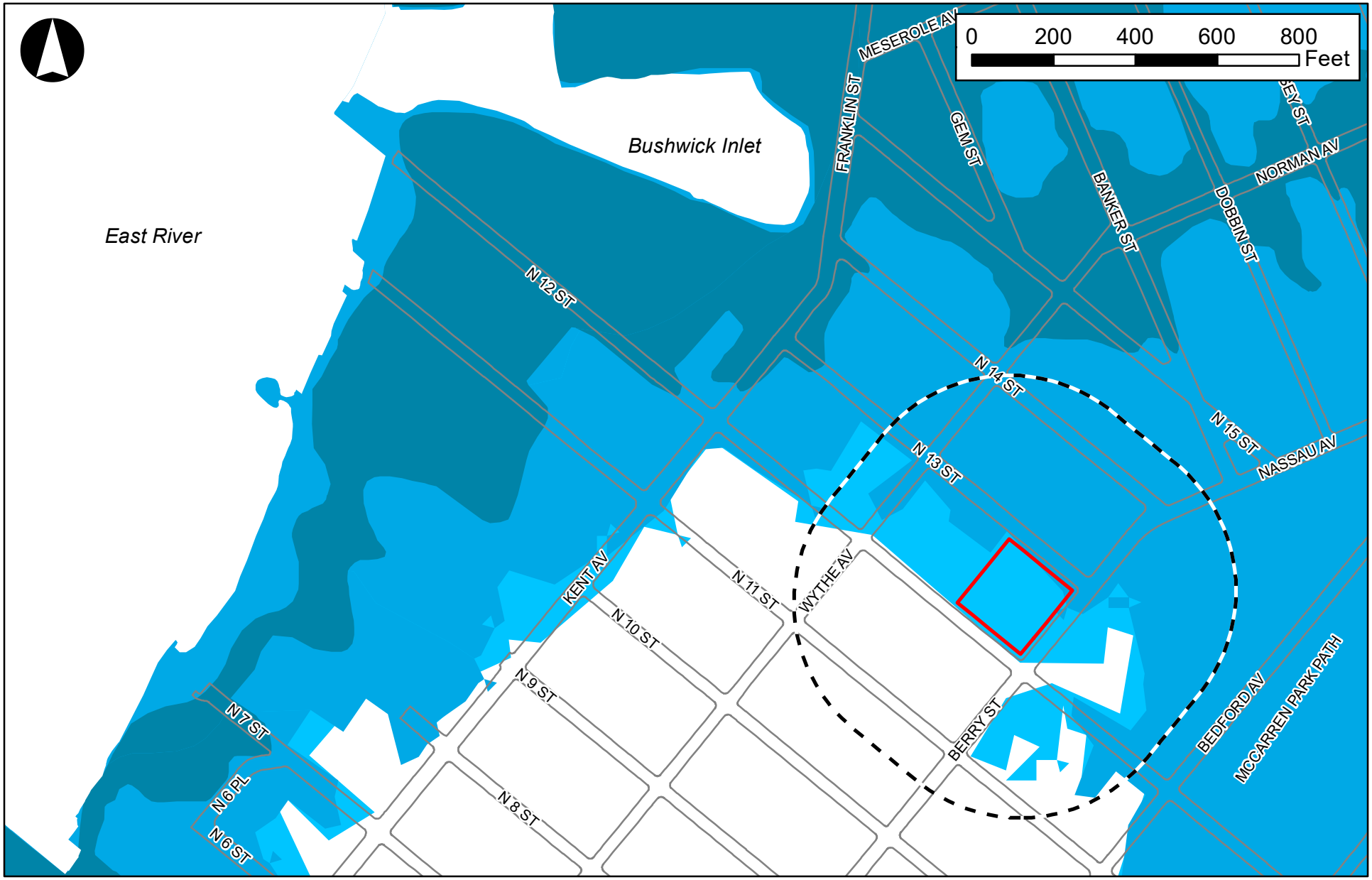
Primary Study Area (Development Site)
Secondary Study Area (400-Foot Radius)
FEMA PFIRM
2020s Projection
2050s Projection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BERRY ST
BEDFORD AV
MCCARREN PARK PATH
Legend
Primary Study Area (Development Site)
Secondary Study Area (400-Foot Radius)
FEMA PFIRM
2020s Projection
2050s Projection

by existing infrastructure and services, including public transit. The surrounding neighborhoods contain a vibrant mix of commercial, light industrial, residential, and open space uses, and have undergone a trend of new development since the adoption of the City's Greenpoint-Williamsburg Rezoning.

As such, the commercial and industrial development that would be facilitated by the Proposed Actions would occur in an area suitable for such development where strong demand for commercial space exists and where the City seeks to retain light industrial space.

Therefore, the Proposed Actions would promote Policy 1.

Policy 1.1: ***Encourage commercial and residential redevelopment in appropriate coastal zone areas.***

The Development Site is an appropriate location for commercial development as it is served by existing infrastructure and public services. Although the Development Site is located within the coastal zone, it is not located within a Significant Maritime and Industrial Area (SMIA), Special Natural Waterfront Area (SNWA), Priority Maritime Activity Zone (PMAZ), Recognized Ecological Complex (REC), or West Shore Ecologically Sensitive Maritime and Industrial Area (ESMIA) (as defined in the WRP). Therefore, it is not located in a special area that may be inappropriate for the development of new commercial or light industrial uses.

Under With-Action conditions, the 40,000-sf Development Site would be redeveloped with a ten-story, mixed-use building. The provided RIUs are pursuant to the IBIA regulations, which must be permanently dedicated for light industrial use to allow a maximum commercial FAR of 4.8 instead of the 1.0 commercial FAR permitted by the site's underlying M1-1 zoning district. It is anticipated that small-scale industrial firms such as furniture, jewelry, or food manufacturers would occupy the light industrial space. Typical office tenants would be part of technology and creative media industries, consistent with existing trends in the surrounding area.

The Applicant's Proposed Project would be built in accordance with special permits and applicable bulk regulations and would be designed to meet the site design, envelope, and urban design requirements that are specified in ZR § 74-96. As the Proposed Actions would encourage the development of commercial uses, the Proposed Project would promote Policy 1.1.

Policy 1.3: ***Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.***

As previously indicated, the Development Site is adequately served by local infrastructure. As described throughout this EAS, the density of the Proposed Project is compatible with the capacity of surrounding transportation facilities and essential community services. It is anticipated that the mix of uses and scale of the Proposed Project would not overburden the area and the Development Site would continue to be adequately served by the existing local infrastructure.

Overall, by facilitating redevelopment in an area served by existing public facilities and infrastructure, the Proposed Project would promote Policy 1.3.

OneNYC

The Proposed Actions would be consistent with the City's sustainability goals, including those outlined in *OneNYC*. In particular, they would support *OneNYC's* land use goals of redeveloping underutilized sites while focusing development in areas that are served by mass transit, ultimately reducing use of automobiles and their associated air pollution emissions and providing walkable employment and retail destinations. As such, the Proposed Actions would be supportive of the applicable goals and objectives of *OneNYC*.

New York Works

The Proposed Actions would be consistent with and supportive of the *New York Works* plan as the Proposed Project's commercial and industrial uses would generate up to 714 total jobs (614 incremental jobs compared to No-Action conditions) in a transit-rich area of Brooklyn that would be accessible to residents of Brooklyn and the greater New York City area. As such, the Proposed Actions would be supportive of the New York Works' goal of creating 100,000 new jobs within New York City.

Assessment

As the Proposed Actions would promote the advance of applicable public policies and would not conflict with any other applicable public policy, it would not result in any significant adverse public policy impacts.

VI. CONCLUSION

No significant adverse impacts on land use, zoning, or public policy, as defined by the guidance for determining impact significance set forth in the 2021 *City Environmental Quality Review (CEQR) Technical Manual*, are anticipated in the future with the Proposed Actions in the Development Site (the primary study area) or within a 400-foot radius (secondary study area). The Proposed Project resulting from the Proposed Actions would not directly displace any land uses so as to adversely affect surrounding land uses. Rather the Proposed Actions would protect light industrial uses within the existing Greenpoint/Williamsburg IBZ and generate land uses that would be compatible with land uses, zoning, and public policies in the secondary study area. The Proposed Actions would not substantially hinder the achievement of any Waterfront Revitalization Program (WRP) policy and the analysis found the project consistent with the WRP policies. Therefore, with these beneficial elements, the Proposed Actions would not result in any significant adverse impacts to land use, zoning, or public policy.

ATTACHMENT D

OPEN SPACE

I. INTRODUCTION

This chapter assesses the potential impacts of the Proposed Actions on open space resources. Open space is defined in the 2021 *City Environmental Quality Review* (CEQR) *Technical Manual* as publicly accessible, publicly or privately owned land that is available for leisure, play, or sport or that serves to protect or enhance the natural environment. *CEQR Technical Manual* guidance indicates that an open space analysis should be conducted if an action would result in a direct effect, such as the physical loss or alteration of public open space, or an indirect effect, such as when a substantial new population could place added demand on an area's open spaces.

As outlined in **Attachment A, "Project Description,"** the Proposed Actions would facilitate an approximately 283,433-gross-square-foot (gsf) commercial/light industrial development (the "Proposed Project") located on the border of the Greenpoint and Williamsburg neighborhoods of Brooklyn. While the Proposed Actions would not have a direct effect on existing open space resources, the reasonable worst-case development scenario (RWCDS) facilitated by the Proposed Actions is expected to result in an incremental increase of approximately 614 incremental workers over the 2025 No-Action condition, which would exceed the *CEQR Technical Manual* threshold of 500 new workers for an indirect open space analysis.

II. METHODOLOGY

The analysis of open space resources has been conducted in accordance with *CEQR Technical Manual* guidance. Using CEQR methodology, the adequacy of open space in the study area is assessed quantitatively using a ratio of usable open space acreage to the study area population, referred to as the open space ratio. This quantitative measure is then used to assess the changes in the adequacy of open space resources in the future, both without and with the Proposed Action. In addition, qualitative factors are considered in assessing the Proposed Actions' potential effects on open space resources.

In accordance with *CEQR Technical Manual* methodologies*,* the open space study area is generally defined by a reasonable walking distance that users would travel to reach local open space and recreational resources. That distance is typically a half-mile radius for residential projects and a quarter-mile radius for commercial projects with a significant worker population. As the Proposed Project would not contain residential uses, a quarter-mile radius is the appropriate study area boundary for the Proposed Actions and RWCDS and is described in greater detail below.

Direct Effects

According to the *CEQR Technical Manual*, a proposed project would directly affect open space conditions if it causes the loss of public open space, changes the use of an open space so that it no longer serves the same user population, limits public access to an open space, or results in increased noise or air pollutant emissions, odor, or shadows that would temporarily or permanently affect the usefulness of a public open space. As no open space resources would be physically altered or displaced as a result of the Proposed

Actions, this chapter uses information from **Attachment E, "Shadows," Attachment I, "Air Quality,"** and **Attachment J, "Noise,"** to determine whether the Proposed Actions have the potential to directly affect any open spaces in close proximity to the Development Site.

Indirect Effects

As described in the *CEQR Technical Manual*, open space can be indirectly affected by a proposed action if it would add enough population, either residential or non-residential, to noticeably diminish the capacity of open space in the area to serve the future population. Typically, an assessment of indirect effects is conducted when a project would introduce more than 200 residents or 500 workers to an area.

Per *CEQR Technical Manual* guidance, the open space analysis and impact assessment is based on the anticipated incremental development from the Proposed Actions. As discussed in **Attachment, "Project Description,"** the Proposed Actions would introduce approximately 614 incremental workers to the Development Site compared to the No-Action condition. As such, an open space assessment for the non-residential population generated by the Proposed Actions is warranted. As the Proposed Actions would not introduce any new residents, the indirect open space impact analysis focuses solely on potential impacts on non-residents (workers).

Open Space Study Area

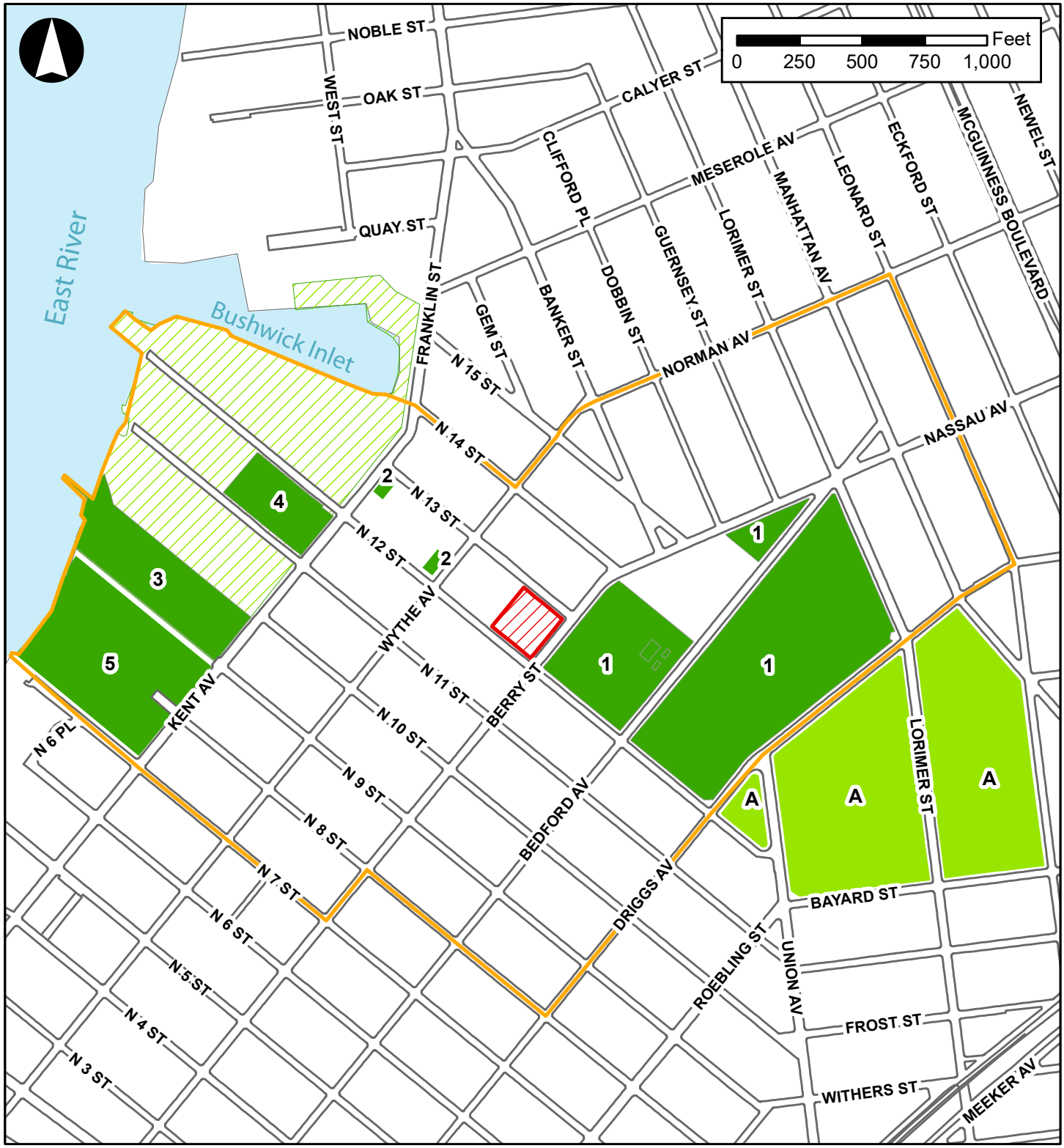
The Development Site comprises Lots 25, 28, 31, 33, 35, 38, 41 and 43 on Brooklyn Block 2283 in the Greenpoint neighborhood of Brooklyn Community District 1 (CD1). In accordance with the guidance established in the *CEQR Technical Manual*, open space study areas are based on the distances that respective users—workers and residents—are likely to walk to an open space. As stated above, as no residential uses would result from the Proposed Actions, the assessment of indirect effects focuses on the non-residential (worker) population of open space users. According to the *CEQR Technical Manual*, workers are assumed to walk approximately 10 minutes, or a quarter-mile from their place of work to an open space. In accordance with this guidance, the adequacy of open space resources was assessed for the quarter-mile (worker) study area. Pursuant to CEQR guidance, this study area was adjusted to include all census tracts with at least 50 percent of their area within the quarter-mile boundary. In this way, the study area allows for analysis of both the open spaces in the area as well as population data. As shown on **Figure D-1**, the quarter-mile open space study area is defined as Census Tracts 517, 557, and 569. The open space study area is generally bounded by Norman and Wythe Avenues to the north, Driggs Avenue, North 7th and North 8th Streets to the south, Leonard Street to the east, and the East River waterfront to the west.

Analysis Framework

The *CEQR Technical Manual* methodology suggests conducting an initial quantitative assessment to determine whether more detailed analyses are appropriate. As the Proposed Actions are expected to introduce more than 500 workers to the study area, a detailed open space assessment is warranted and is provided below.

With an inventory of available open space resources and potential users, the adequacy of open space in the study area can be assessed both quantitatively and qualitatively. The quantitative approach computes the ratio of open space acreage to the population in the study area and compares these ratios with certain guidelines. The qualitative assessment examines other factors that may affect conclusions about adequacy, including proximity to additional resources beyond the study area, the availability of private

Figure D-1
Open Space Study Area and Resources



Legend

- Development Site
- Open Space Study Area
- Quantitative Open Space Resource
- Qualitative Open Space Resource
- Future Extent of Bushwick Inlet Park

recreational facilities, and the demographic characteristics of the study area's population. Specifically, the analysis in this chapter includes:

- The open space study area population. To determine the number of workers in the study area, worker data provided by the US Census Bureau's OnTheMap application, which is based on Longitudinal Employer-Household Dynamics (LEHD) Origin-Destination Employment Statistics (beginning of Quarter Employment, 2nd Quarter of 2002-2019), have been compiled for census tracts comprising the open space study area. Because the study area has a residential population that may also use open spaces, in accordance with *CEQR Technical Manual* guidance, the number of residents in the study area has also been calculated, based on 2020 US Census data.

- An inventory of all publicly accessible passive and active recreational facilities in the quarter-mile open space study area.

- An assessment of the quantitative ratio of open space in the study area by computing the ratio of open space acreage to the population in the study area and comparing this open space ratio with certain guidelines. According to the *CEQR Technical Manual*, a ratio of 0.15 acres of passive open space per 1,000 workers represents a reasonable amount of open space. The needs of workers and residential populations are also considered together in the study area because it is assumed that both will use the same passive open spaces. Therefore, a weighted average is also considered for the analysis that balances the amount of open space necessary to meet the guideline of 0.50 acres of passive open space per 1,000 residents and 0.15 acres of passive open space per 1,000 workers. Because this ratio changes depending on the proportion of residents and workers in the study area, the tables summarizing the open space ratios outline the amount of open space needed in each condition in the study area, and calculate the weighted average ratio of passive open space acres per 1,000 combined residents and workers.

- An evaluation of qualitative factors affecting open space use.

- A determination of the adequacy of open space in the quarter-mile open space study area in the existing condition, the No-Action condition, and the With-Action condition.

- An assessment of expected changes in future levels of open space supply and demand in the 2025 analysis year, based on other planned development projects within the open space study area. To estimate the non-residential population expected in the study area in the future without the Proposed Actions, employment ratio assumptions were used as follows: one employee per 1,000 sf for industrial/warehousing, one employee per 250 sf of office space, three employees per 1,000 sf of retail/restaurant, and one employee per 50 parking spaces. Residential population expected in the study area in the No-Action condition was estimated based on a ratio of 2.43 residents per unit (2020 Census average household size for Brooklyn CD1). Any new open space or recreational facilities that are anticipated to be operational by the analysis year are also accounted for. Open space ratios are calculated for future No-Action conditions and compared with existing ratios to determine changes in future levels of open space adequacy.

Impact Assessment

Impacts are based in part on how a project would change the open space ratios in the study area as well as other qualitative considerations. According to the *CEQR Technical Manual*, a decrease in an open space

ratio of five percent or more compared to the No-Action condition is generally considered to be a significant adverse impact. If a study area exhibits a low open space ratio, indicating a shortfall of open space, smaller decreases in that ratio as a result of the action may constitute significant adverse impacts. Conversely, in areas that are within a Walk to a Park Service Area (i.e., areas of the city that are within a walking distance of a park), a greater percentage of change (more than five percent) may be tolerated.

In addition to the quantitative factors cited above, the *CEQR Technical Manual* also recommends consideration of qualitative factors in assessing the potential for open space impacts. These include the availability of nearby destination resources, the beneficial effects of new open space resources provided by a project, and the comparison of projected open space ratios with established City guidelines. It is recognized that the open space ratios of the City guidelines described above are not feasible for many areas of the City, and they are not considered impact thresholds on their own. Rather, these are benchmarks that indicate how well an area is served by open space. Determinations as to what constitutes a significant adverse open space impact are not based solely on the results of the quantitative assessment. Qualitative considerations such as the distribution of open space, whether a site is within a Walk to a Park Service Area, the distance to regional parks, the connectivity of open space, and any additional open space provided by the proposed project, should be considered in a determination of significance.

III. EXISTING CONDITIONS

Study Area Population

Non-Residential Population

As shown in **Table D-1**, based on worker data compiled by the US Bureau, the existing worker population for the open space study area is estimated at approximately 3,410 workers.

TABLE D-1: Study Area Non-Residential and Residential Populations

Census Tract	Non-Residential (Worker) Population[1]	Residential Population[2]	Total Population
517	504	2,636	3,140
557	1,948	1,848	3,796
569	958	1,624	2,582
1/4-Mile Study Area Total	***3,410***	***6,108***	***9,518***

Sources: [1] US Census Bureau, OnTheMap application and LEHD Origin-Destination Employment Statistics.
[2] US Census Bureau, 2020 census.

Residential Population

As also shown in **Table D-1**, 2020 census data indicate that the study area has a residential population of approximately 6,108 persons.

Total User Population

Within the study area, the total population (workers plus residents) is estimated to be 9,518 (refer to **Table D-1**). Although this analysis conservatively assumes that the employees and residents are separate populations, it is possible that some of the employees live near their workplace or work from home. As a result, there is likely to be some double-counting of the daily user population in which non-residential and residential populations overlap, resulting in a more conservative analysis.

Inventory of Publicly Accessible Open Space

According to the *CEQR Technical Manual*, open space may be public or private and may be used for active or passive recreational purposes. Pursuant to the *CEQR Technical Manual*, publicly accessible open space is defined as facilities open to the public at designated hours on a regular basis and is assessed for impacts using both a quantitative and a qualitative analysis, whereas private open space is not accessible to the general public on a regular basis and is considered only qualitatively. Field surveys and secondary sources were used to determine the number, availability, and condition of publicly accessible open space resources in the study area.

An open space is determined to be active or passive by the uses that the design of the space allows. Active open space is the part of a facility used for active play such as sports or exercise and may include playground equipment, playing fields and courts, swimming pools, skating rinks, golf courses, lawns, and paved areas for active recreation.

Passive open space (which is the focus of non-residential open space impact assessment) is used for sitting, strolling, and relaxation, and typically contains benches, walkways, and picnicking areas. However, some passive spaces can be used for both passive and active recreation; such as a lawn or riverfront walkway, which can also be used for ball playing, jogging, or rollerblading.

All of the publicly accessible open space and recreational resources within the defined study area are identified in **Figure D-1** and listed in **Table D-2**. As shown in **Figure D-1** and **Table D-2**, five publicly accessible open space and recreational resources are located within the study area. These study area open space resources contain a total of 30.49 acres of open space, of which approximately 15.13 acres (49.6 percent) comprise passive open space uses and approximately 15.37 acres (50.4 percent) comprise active open space uses.

The largest open space resource located in the study area is the approximately 36-acre **McCarren Park**; however, only the western portion of the park is located fully within the study area (see **Figure D-1**). As such, only this western portion (identified as McCarren Park West in **Table D-2** and Map No. 1 in **Figure D-1**) is included in the quantitative open space analysis while the remaining portion (McCarren Park East) is included in the quantitative analysis. **McCarren Park West**, which is operated by the New York City Department of Parks and Recreation (NYC Parks), contains just under half of the park's total area (approximately 17.32 acres) and is bounded by Nassau Avenue and Berry Street to the north/northwest, Lorimer Street to the east, Driggs Avenue to the southeast, and North 12th Street to the southwest. As shown in **Table D-2**, active uses comprise approximately 60 percent of the park and include public baseball and softball fields, as well as the seven court McCarren Park Tennis Center which is bubbled during the indoor season (the day after Columbus Day-April 27) and may be rented for a fee. The remaining area contains passive uses such as BBQ areas, tables, benches, lawns, trees, dog-friendly areas, and a comfort station. In addition, the northern end of the park contains Father Jerzy Popieluszko Square which was dedicated in 1990 for a Polish priest who was martyred during the Soviet occupation of Poland.

McCarren Park East (Map Ltr. A) is also operated by NYC Parks and is bounded by Driggs Avenue to the northwest, Manhattan Avenue to the northeast, Leonard Street to the east, Bayard Street to the south, Union Avenue to the west, and North 12th Street to the southwest. This approximately 18.96 acre portion contains passive uses such as benches, tables, and BBQ areas, as well as areas for active uses (basketball courts, bocce courts, fitness equipment, handball courts, an outdoor pool, playgrounds, a running track, a skate park, soccer fields, and spray showers). In addition, this portion contains dog-friendly areas and hosts a farmers market on Saturdays.

The **Privately Owned Public Space (POPS) at 25 Kent Avenue** (Map No. 2) was constructed as part of 19 Kent Acquisition's recent development of the mixed-use building at 25 Kent Avenue. The 0.22-acre passive open space resource includes two plazas which include benches, tables, and landscaping. The 25 Kent Avenue POPS is in excellent condition with low utilization.

Another significant open space resource in the study area is the 4.15–acre completed portion of **Bushwick Inlet Park** (Map No. 3), located west of the Development Site and is bounded by North 9th Street to the south, North 10th Street to the north, Kent Avenue to the east, and the East River waterfront to the west. Bushwick Inlet Park, which is operated by NYC Parks, features several passive recreational uses, including a comfort station, a viewing platform, and a lawn surrounded by benches. Additionally, the open space contains playgrounds and a synthetic turf multi-purpose field for field hockey, football, lacrosse, rugby, soccer, and ultimate Frisbee for active recreation. The open space, in its current 4.15-acre state, represents the initial phase of Bushwick Inlet Park, which will ultimately comprise a total of 35.5 acres. As shown in **Figure D-1**, the completed park will span five and a half blocks along the East River waterfront between North 9th Street (south) and Quay Street (north). In the future, when all phases of Bushwick Inlet Park are complete and operational, the Development Site will be located two blocks to the east of the open space's Franklin Street frontage where the park will border Bushwick Inlet.

The **Bushwick Inlet Pop-Up Park** (Map No. 4) is located at 50 Kent Avenue between North 11th and North 12th Streets. The 1.8-acre open space resource is part of the larger 35.53-acre Bushwick Inlet Park to be completed in the No-Action condition. The Pop-Up Park contains an open field which includes active spaces for mini Frisbee golf and badminton, as well as lawns and picnic tables for passive recreation. Bushwick Inlet Pop-Up Park is operated by NYC Parks, is in fair condition with low utilization. The permanent design was approved in 2018, construction commenced in 2020, and this section of the park is scheduled to be open to the public in the spring of 2022. It will contain a grassy hill overlook, groves of trees and a water spray area.

Marsha P. Johnson State Park (formerly East River State Park)[1] (Map No. 5) is located to the southwest of the Development Site (to the south of Bushwick Inlet Park) and bounded by North 9th Street to the north, North 7th Street to the south, Kent Avenue to the east, and the East River waterfront to the west. The approximately seven-acre open space is operated by the New York State Office of Parks, Recreation, and Historic Preservation (NYS OPRHP) and features both active and passive recreational uses, including a dog run, playgrounds, lawns, picnic tables, and benches. Marsha P. Johnson State Park is also home to Smorgasburg, an outdoor food market that operates in the park on Saturdays from April through October.

[1] East River State Park was renamed by Governor Cuomo on February 1, 2020, in honor of Marsha P. Johnson.

Table D-2: Open Space Resources within the Quarter-Mile Open Space Study Area

Map No.[1]	Name	Location	Owner/ Agency*	Amenities	User Groups	Hours of Operation	Acreage	Active		Passive		Condition/ Utilization
								Acres	%	Acres	%	
Open Space Resources Included in Quantitative Analysis 1/4-Mile Study Area												
1	McCarren Park West	Bounded by Nassau Ave., Berry St., Lorimer St., Driggs Ave., and N. 12th St.	NYC Parks	Father Jerzy Popieluszko Square, BBQ Areas, Baseball and Softball Fields, Tennis Courts, Bathrooms, Benches, Tables, Lawns	Children, Teenagers, Adults, Senior Citizens	6AM to 1AM	17.32	10.39	60%	6.93	40%	Excellent/ High
2	25 Kent POPs	25 Kent Ave.	19 Kent Acquisition LLC	Benches, Tables, Landscaping, Trees	Children, Teenagers, Adults, Senior Citizens	24/7	0.22	0.0	0%	0.22	100%	Excellent/ Low
3	Bushwick Inlet Park	Bounded by Kent Ave., N. 9th and N. 10th Sts.	NYC Parks	Comfort Station, Playgrounds, Soccer/Football Fields, Lawn, Benches	Children, Teenagers, Adults, Senior Citizens	9AM to 10PM	4.15	2.08	50%	2.08	50%	Excellent/ Moderate
4	Bushwick Inlet Pop-Up Park	Bounded by Kent Ave., N. 11th and N. 12th Sts.	NYC Parks	Field, Lawn, Landscaping, Tables	Children, Teenagers, Adults	10AM to 6PM Thurs. to Sun.	1.80	0.45	25%	1.35	75%	Fair/ Low
5	Marcha P. Johnson State Park	90 Kent Ave.	NYS OPRHP	Dog Run, Playgrounds, Lawns, Picnic Tables, Benches, WiFi Access	Children, Teenagers, Adults, Senior Citizens	9AM to 9PM (May to Oct.); 9AM to 7PM (Oct. to May)	7.00	2.45	35%	4.55	65%	Good/ Moderate
1/4-Mile Study Area Total							**30.49**	**15.37**	**50.4%**	**15.13**	**49.6%**	
Open Space Resources Not Included in Quantitative Assessment												
A	McCarren Park East	Bounded by Driggs Ave., Manhattan Ave., Leonard St., Bayard St. Union Ave., N. 12th St.	NYC Parks	Basketball Courts, Bathrooms, Benches and Tables, Bocce Courts, Dog-Friendly Areas, Fitness Equipment, Football Fields, Handball Courts, Outdoor Pools, Playgrounds, Running Tracks, Skate Parks, Soccer Fields	Children, Teenagers, Adults, Senior Citizens	6AM to 1AM	18.96	11.37	60%	7.58	40%	
1/4-Mile Study Area Total							**18.96**	**11.37**	**60%**	**7.58**	**40%**	

Sources: OASIS, NYC Parks, 2021 PLUTO data, PHA site visits conducted August 2021 and January 2022.
Note: [1]Map keyed to **Figure D-1.**

Assessment of Open Space Adequacy

As described above, the analysis of the study area focuses on passive open spaces that may be used by workers in the area. To assess the adequacy of open space resources in the study area, the ratio of workers to acres of passive open space is compared to the City's planning guideline of 0.15 acres of passive space per 1,000 workers. In addition, the combined passive open space ratio for both workers and residents in the study area is compared with the recommended weighted average ratio.

Quantitative Assessment

The study area includes a total of 30.49 acres of open space, of which approximately 15.13 acres contain passive uses. A total of 3,410 people work within the defined study area boundary, and 6,108 residents live within this study area. The combined non-residential and residential population is 9,518.

Based on *CEQR Technical Manual* methodology, the non-residential study area has a passive open space ratio of 4.44 acres per 1,000 workers, which is well over the City's guidance of 0.15 acres (see **Table D-3**). As such, workers in the quarter-mile study area are well-served by open space resources under existing conditions. Similarly, the combined passive open space ratio is 1.59 acres per 1,000 residents and workers, which is well over the recommended weighted average ratio of 0.375 acres per 1,000 combined users (refer to **Table D-3**).

TABLE D-3: Adequacy of Open Space Resources: Existing Conditions

		Open Space Acreage			Open Space Ratios per 1,000 People			*CEQR Technical Manual* Open Space Optimal Planning Goal		
	Population	Total	Passive	Active	Total	Passive	Active	Total	Passive	Active
Workers	3,410	30.49	15.13	15.37	N/A	4.44	N/A	N/A	0.15	N/A
Combined Workers & Residents	9,518				N/A	1.59	N/A	N/A	0.375[1]	N/A

Notes: [1]Based on target open space ratios established by creating a weighted average of the amount of open space necessary to meet the City guidance of 0.50 acres of passive open space per 1,000 residents and 0.15 acres of passive open space per 1,000 workers.

Qualitative Assessment

As shown in **Table D-2**, the study area 's open space resources are generally in excellent condition and feature low to high utilization levels. The study area includes many passive open space uses, such as walkways, lawns, and landscaped areas, benches, and picnic tables, all of which are suitable for use by the non-residential population in the study area. In addition, while McCarren Park East (Map Ltr. A) was conservatively excluded from the open space analysis in accordance with CEQR guidance census tract configurations, this 18.96-acre portion of the larger 36.49-acre park is located two blocks to the southeast of the Development Site and is likely to be utilized by a portion of the population who live and work in the defined study area. As noted above, McCarren Park East is operated by NYC Parks and features several passive recreational uses, including benches, lawns, and BBQ areas, in addition to an outdoor pool, a running track, multiple basketball and tennis courts, and fitness equipment for active recreation.

Moreover, as noted above, the quantitative analysis is conservative in scope as it assumes that daytime users (workers) and residents are separate populations, although it is possible that some of the workers live near their workplace or work from home, resulting in some double-counting of the daily user population in the study area.

IV. THE FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION CONDITION)

Study Area Population

In the No-Action condition, it is anticipated that the existing buildings on the Development Site would not be redeveloped, but the two Applicant-occupied buildings would remain utilized by warehouse uses and the remaining six would be occupied by retail uses which are prevalent in the surrounding area. As discussed in **Attachment A, "Project Description,"** these No-Action uses on the Development Site would add approximately 100 workers to the study area. In addition, a number of unrelated projects are expected to be completed in the vicinity of the Development Site by 2025 of which four would fall within the quarter-mile open space study area. These "No-Build" developments and their projected populations are shown in **Table D-4**.

TABLE D-4: No-Build Sites and Population

Address	Residential SF	OfficeSF	Retail SF	Manufacturing SF	Community Facility SF	Residents[1]	Workers[2]
103 North 13th Street	0	42,079	22,657	10,548	0	0	247
29 Wythe Avenue	0	136,115	12,668	23,763	0	0	613
94 Guernsey Street	6,595	0	0	0	1,092	15	4
185 North 8th Street	99,210	0	23,604	0	0	107	75
Total	*105,805*	*178,194*	*58,929*	*34,311*	*1,092*	*122*	*939*

Source: 2020 US Census
Notes: [1]Residential population based on average household size of 2.43 for Brooklyn CB1
[2]See EAS Form for employee generation rates

As shown in **Table D-4**, the four known No-Build development projects would add an estimated 122 residents and 939 workers to the study area. Altogether, when combined with the 100 workers introduced under the No-Action condition on the Development Site, the total combined study area population is expected to increase to 10,679 in the No-Action condition (4,449 workers and 6,230 residents), as shown in **Table D-5**.

TABLE D-5: No-Action Open Space Study Area Population

	Existing Population	No-Action Population on Development Site	Additional Population in Study Area resulting from Known Development Projects	2025 No-Action Population
Workers	3,410	100	939	4,449
Combined Workers & Residents	9,518	100	1,061	10,679

Source: 2020 US Census

Open Space Resources

Under No-Action conditions, NYC Parks plans to expand Bushwick Inlet Park in the open space study area (see **Figure D-1**). As noted above, Bushwick Inlet Park and the Bushwick Inlet Pop-Up Park are the initial phases of Bushwick Inlet Park which will, once completed, span 5.5 blocks along the East River waterfront between North 9th Street and Quay Street. The City of New York has recently completed the land

acquisition phase for the proposed expansion, which will add an additional 29.55 acres of publicly accessible open space to the study area when the Bushwick Inlet Park expansion is completed and operational, for a total park acreage of 35.5. The City, in conjunction with NYC Parks, is currently in the process of remediating several of the former industrial properties that will become part of Bushwick Inlet Park in the future. However, at this time, no project timeline or completion date for the overall expansion project has been finalized. Therefore, for conservative analysis purposes, the additional 29.55 acres of open space in the completed Bushwick Inlet Park are not included in the quantitative analysis below. Nevertheless, when completed, the expansion of Bushwick Inlet Park will provide a significant amount of new active and passive open spaces to the study area surrounding the Development Site and significantly improve the conditions and usability of open space in the study.

Assessment of Open Space Adequacy

As noted above, it is anticipated that new development in the study area will result in an increase in the population in the future without the Proposed Actions. As a result of these anticipated No-Action changes, the ratio of passive open space per 1,000 workers would decrease to 3.40 (from 4.44 under existing conditions); however, it will continue to be well above the City's planning guideline ratio of 0.15 acres (see **Table D-6**). Similarly, while the ratio for the combined population of workers and residents would decrease to 1.42 (from 1.59 under existing conditions), it will continue to exceed the calculated No-Action recommended weighted ratio of 0.354.

TABLE D-6: Adequacy of Open Space Resources: No-Action Condition

	2025 No-Action Population	Open Space Acreage			Open Space Ratios per 1,000 Persons			*CEQR Technical Manual* Open Space Optimal Planning Goal		
		Total	Passive	Active	Total	Passive	Active	Total	Passive	Active
Workers	4,449	30.49	15.13	15.17	N/A	3.40	N/A	N/A	0.15	N/A
Combined Workers & Residents	10,679				N/A	1.42	N/A	N/A	0.354[1]	N/A

Note: [1]Based on target open space ratios established by creating a weighted average of the amount of open space necessary to meet the City guideline of 0.50 acres of passive open space per 1,000 residents and 0.15 acres of passive open space per 1,000 workers.

V. THE FUTURE WITH THE PROPOSED ACTIONS (WITH-ACTION CONDITION)

In the 2025 future with the Proposed Actions, the Development Site would be redeveloped with an approximately 283,433-gsf, mixed-use building. The Proposed Project would comprise approximately 47,171 gsf of retail, 124,224 gsf of commercial office, 13,166 of restaurant space, 32,990 gsf of light industrial space, and 80 parking spaces. Collectively, the Proposed Project would introduce approximately 714 total workers to the study area, representing 614 additional workers compared to No-Action conditions.

In addition, as described in **Attachment A, "Project Description,"** the Proposed Project is anticipated to include both open to the sky and partially covered publicly accessible open space ("PAA space") on the eastern portion of the Development Site, totaling approximately 9,690 sf (0.22 acres), which would provide physical and visual through-block-connectivity accessible to the public. Approximately 7,135 sf of the project generated open space would be open to the sky (including an approximately 4,800 sf public plaza) and approximately 2,555 sf would be partially covered. The PAA space would occupy a portion of

the Development Site's Berry Street frontage with auxiliary access along North 12th and North 13th Streets. It would include a variety of public seating options throughout, including accessible companion seating, as well as benches and movable tables and chairs. In addition, the Proposed Project would feature a variety of plantings such as trees, shrubs, and grasses. Two pedestrian pathways would extend north-south from North 13th Street to the middle of the Development Site and then from the middle of the site to North 12th Street. Both pedestrian pathways provide access to the public plaza and would be flanked by ground level retail frontage to promote activity and security. The areas open to the sky would also include plantings and trees, as part of the landscape features. The proposed PAA space areas at the eastern portion of the Development Site would introduce new, dynamic streetscapes which would facilitate the extension of the public realm from the adjoining streets and McCarren Park into the Development Site.

Direct Effects

No publicly accessible open space is currently located on the Development Site. Therefore, the Proposed Actions would not cause the physical loss of publicly accessible open space. In addition, as discussed in **Attachment E, "Shadows," Attachment I, "Air Quality,"** and **Attachment J, "Noise,"** the Proposed Actions would not result in any significant adverse shadows, operational air quality, or noise impacts affecting existing open space resources. Furthermore, the Proposed Actions would not change the use of a publicly accessible open space resource so that it no longer serves the same user population, nor would it limit public access to any open space resources.

Indirect Effects

Study Area Population

In total, the Proposed Project would introduce an estimated 614 new incremental workers over the No-Action condition. As indicated in **Table D-7**, this additional population is expected to increase the study area's worker population to 5,063 and the combined worker and residential population to 11,293.

TABLE D-7: With-Action Open Space Study Area Population

	No-Action Population	Incremental Population on Development Site	2025 With-Action Population
Workers	4,449	614	5,063
Combined Workers & Residents	10,679	614	11,293

Open Space Resources

As noted above, the Proposed Project would introduce approximately 0.22 acres of partially covered passive open space areas to the study area, which would provide physical and visual through-block-connectivity accessible to the public and is therefore included in the quantitative analysis.

Assessment of Open Space Adequacy

Quantitative Assessment

As presented in **Table D-8**, in the future with the Proposed Actions, the ratio of passive open space per 1,000 workers would decrease to 3.03 (from 3.40 under No-Action conditions); however, it would continue to be well above the City's guideline ratio of 0.15 acres. Similarly, the passive open space ratio for the combined population of residents and workers, which would only decrease slightly to 1.36 (compared to 1.42 in the No-Action condition), would continue to exceed the calculated With-Action recommended weighted ratio of 0.34.

TABLE D-8: Adequacy of Open Space Resources: With-Action Condition

		Open Space Acreage			Open Space Ratios per 1,000 Persons			*CEQR Technical Manual* Open Space Optimal Planning Goal		
	Population	Total	Passive	Active	Total	Passive	Active	Total	Passive	Active
Workers	5,063	30.71	15.35	15.37	N/A	3.03	N/A	N/A	0.15	N/A
Combined Workers & Residents	11,293				N/A	1.36	N/A	N/A	0.34[1]	N/A

Note: [1]Based on target open space ratios established by creating a weighted average of the amount of open space necessary to meet the City guideline of 0.50 acres of passive open space per 1,000 residents and 0.15 acres of passive open space per 1,000 workers.

Qualitative Assessment

In the future with the Proposed Actions, the worker and combined residential/worker passive open space ratios would remain well above the City's planning guideline and recommended weighted ratios of 0.15 acres and 0.34 acres, respectively. The study area's workers and residents would also be able to make use of portions of the approximately 18.96-acre, eastern portion of McCarren Park (McCarren Park East) which is accessible just beyond the southeastern boundary of the defined study area and within an easy walking distance from the Development Site (see **Figure D-1**). As noted above, although McCarren Park East was conservatively excluded from the quantitative analysis pursuant to CEQR guidance, it is likely that it is used by people that live and work in the defined study area. Moreover, a majority of the study area open spaces are in excellent condition and use levels are characterized as moderate. Additionally, the Proposed Project would provide on-site amenities, such as 0.22 acres of publicly accessible open space areas and several private roof terraces, which would be accessible to the on-site worker population generated by the Proposed Project.

It should also be noted that this analysis conservatively does not include any component of the planned Bushwick Inlet Park expansion, which would add approximately 29.55 acres of publicly accessible open space to the study area, significantly improving the conditions and usability of open space in the study area in the future. Lastly, the quantitative analysis is conservative as it assumes that workers and residents are separate populations, whereas it is possible that some of the workers live near their workplace or work from home, resulting in some double-counting of the daily user population in the non-residential study area.

Determining Impact Significance

Per *CEQR Technical Manual* guidance, a significant adverse open space impact may occur if a proposed action would reduce the open space ratio by more than five percent in areas that are currently below the City's median Community District open space ratio of 1.5 acres per 1,000 residents. In areas that are extremely lacking in open space, a reduction of as little as one percent may be considered significant, depending on the area of the City. Conversely, in areas that are within a Walk to a Park Service Area, a greater percentage of change (more than five percent) may be tolerated. These reductions may result in the overburdening of existing facilities or further exacerbating a deficiency in open space. **Table D-9** displays the percentage change from No-Action to With-Action conditions for the study area.

TABLE D-9: Study Area Open Space Ratios Summary

Ratio	*CEQR Technical Manual* Open Space Optimal Planning Goal (acres per 1,000)	Open Space Ratios per 1,000			Percent Change (Future No-Action to Future With-Action)
		Existing	No-Action	With-Action	
Passive – Workers	0.15	4.44	3.40	3.03	-10.88%
Passive – Combined Workers + Residents	0.15 for Workers, 0.5 for Residents[1]	1.59	1.42	1.36	-4.23%

Note: [1]Calculated weighted ratio of 0.32 for Existing, 0.30 for No-Action, and 0.30 for With-Action conditions.

As shown in **Table D-9**, while the non-residential study area's passive open space ratio would decrease by more than five percent in the future with the Proposed Actions as compared to No-Action conditions, the passive open space ratio would remain well above the City's guideline ratio of 0.15 acres per 1,000 workers, at 3.03 acres per 1,000 workers. In addition, as shown in **Figure D-2**, the Development Site is located within a Walk to a Park Service Area and, therefore, is not located within a walk gap area (i.e., an area of the City that is not within a walking distance to a park). As such, workers in the quarter-mile study area would continue to have access to passive open space resources, and there would be no significant adverse impact on open space in the defined study area as a result of the Proposed Actions. In addition, although the Proposed Project would increase the demand for passive open space for the daytime population in the study area, that demand could be partially absorbed by the proposed 0.22-acre PAA space that would be provided on the Development Site in the future with the Proposed Actions, as well as by the roof terraces proposed as part of the project. Therefore, the Proposed Actions would not result in a significant adverse open space impact, and further analysis is not needed.

Figure D-2
Walk to a Park Service Area



Legend

Development Site
Open Space Study Area
Walk to a Park Service Area

ATTACHMENT E

SHADOWS

I. INTRODUCTION

This chapter assesses the potential for the Proposed Actions to result in incremental shadows long enough to reach any nearby publicly accessible open spaces or other sunlight-sensitive resources. According to the 2021 *City Environmental Quality Review (CEQR) Technical Manual*, a shadows assessment is required if a proposed action would result in structures (or additions to existing structures) of 50 feet in height or greater, or those that would be located adjacent to, or across the street from, a sunlight sensitive resource. As discussed in **Attachment A, "Project Description,"** the Proposed Development would facilitate a new building greater than 50 feet in height over the No-Action condition and is located west of the McCarren Park and east of the 25 Kent Avenue Privately Owned Public Open Space (POPS). As such, a detailed shadows analysis was prepared to determine the potential for the Proposed Development to result in significant adverse impacts on any sunlight-sensitive resources in the surrounding area.

II. METHODOLOGY

According to the *CEQR Technical Manual*, the longest shadow a structure will cast in New York City, except for periods close to dawn or dusk, is 4.3 times its height. For projects or actions resulting in structures less than 50 feet tall, a shadow assessment is generally not necessary, unless the site is adjacent to a park, historic resource, or important natural feature (if the feature that makes the structure significant depends on sunlight).

First, a preliminary screening assessment must be conducted to ascertain whether shadows resulting from a project could reach any sunlight-sensitive resource at any time of year. The *CEQR Technical Manual* defines sunlight-sensitive resources as those resources that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity. The following are considered to be sunlight-sensitive resources:

- *Public open space* (e.g., parks, playgrounds, plazas, schoolyards, greenways, and landscaped medians with seating). Planted areas within unused portions or roadbeds that are part of the Greenstreets program are also considered sunlight-sensitive resources. The use of vegetation in an open space establishes its sensitivity to shadows. This sensitivity is assessed for both (1) warm-weather dependent features, like wading pools and sandboxes, or vegetation that could be affected by loss of sunlight during the growing season (i.e., March through October); and (2) features, such as benches, that could be affected by a loss of winter sunlight. Uses that rely on sunlight include: passive use, such as sitting or sunning; active use, such as playfields or paved courts; and such activities as gardening, or children's wading pools and sprinklers. Vegetation requiring direct sunlight includes the tree canopy, flowering plants, and plots, particularly plots for food production in community gardens. The amount of sunlight typically considered to be the minimum that plantings and vegetation would need is six to eight hours of direct sunlight. However, certain plantings and vegetation can tolerate partial sun, with a reduced minimum requirement of four to six hours of direct sunlight. Examples of areas that can tolerate partial sun are established tree canopies, shrubs or perennials.
- *Features of historic architectural resources that depend on sunlight for their enjoyment by the public.*

Only the sunlight-sensitive features are considered, as opposed to the entire architectural resource. Sunlight-sensitive features include the following: design elements that are part of a recognized architectural style that depends on the contrast between light and dark (e.g., deep recesses or voids, such as open galleries, arcades, recessed balconies, deep window reveals, and prominent rustication); elaborate, highly carved ornamentation; stained glass windows; exterior building materials and color that depend on direct sunlight for visual character (e.g., the polychromy [multicolored] features found on Victorian Gothic Revival or Art Deco facades); historic landscapes, such as scenic landmarks, including vegetation recognized as an historic feature of the landscape; and structural features for which the effect of direct sunlight is described as playing a significant role in the structure's importance as an historic landmark.

- *Natural resources where the introduction of shadows could alter the resource's condition or microclimate.* Such resources could include community gardens, surface water bodies, wetlands, or designated resources, such as coastal fish and wildlife habitats.

Non-sunlight-sensitive resources include the following, for the purposes of CEQR:

- *City streets and sidewalks (*except Greenstreets);
- *Private open space* (e.g., front and back yards, stoops, vacant lots, and private, non-publicly accessible open space); and
- *Project-generated open space* cannot experience a significant adverse shadow impact from the project, according to CEQR, because without the project the open space would not exist; however, a discussion of how shadows would affect the new space may be warranted.

The preliminary screening assessment consists of three tiers of analysis. The first tier determines a simple radius around the proposed buildings representing the longest shadow that could be cast. If there are sunlight-sensitive resources within the radius, the analysis proceeds to the second tier, which reduces the area that could be affected by project-generated shadows by accounting for a specific range of angles that can never receive shade in New York City due to the path of the sun in the northern hemisphere. If the second tier of analysis does not eliminate the possibility of new shadows on sunlight-sensitive resources, a third tier of screening analysis further refines the area that could be reached by new shadows by looking at specific representative days of the year and determining the maximum extent of shadow over the course of each representative day. If the third tier of analysis does not eliminate the possibility of new shadows on sunlight-sensitive resources, a detailed shadow analysis is required to determine the extent and duration of the incremental shadow resulting from the project.

In accordance with the *CEQR Technical Manual*, shadows on sunlight-sensitive resources of concern are modeled for four representative days of the year. For the New York City area, the months of interest for an open space resource encompass the growing season (i.e., March through October) and one month between November and February representing a cold-weather month (usually December). Representative days for the growing season are generally the March 21st vernal equinox (or the September 21st autumnal equinox, which is approximately the same), the June 21st summer solstice, and a spring or summer day halfway between the summer solstice and equinoxes, such as May 6th or August 6th (which are approximately the same). For the cold- weather months, the December 21st winter solstice is included to demonstrate conditions when open space users rely most heavily on available sunlight warmth. As these months and days are representative of the full range of possible shadows, they are also used for assessing shadows on sunlight-sensitive historic and natural resources. The *CEQR Technical*

Manual defines the temporal limits of a shadow analysis period to fall from an hour and a half after sunrise to an hour and a half before sunset.

The detailed analysis provides the data needed to assess the shadow impacts. The effects of the new shadows on the sunlight-sensitive resources are described, and their degree of significance is considered. The result of the analysis and assessment are documented with graphics, a table of incremental shadow durations, and narrative text. As described in the *CEQR Technical Manual*, an incremental shadow is generally not considered significant when its duration is no longer than ten minutes at any time of year and the resource continues to receive substantial direct sunlight. A significant shadow impact generally occurs when an incremental shadow of ten minutes or longer falls on a sunlight-sensitive resource and results in one of the following:

- *Vegetation:* a substantial reduction in sunlight duration available to sunlight-sensitive features of the resource to less than the time of its minimum sunlight needs (when there would be sufficient sunlight in the future without the project) or a reduction in direct sunlight exposure where the sensitive feature of the resource is already subject to substandard sunlight (i.e., less than the minimum sunlight needs).
- *Historic and cultural resources:* a substantial reduction in sunlight available for the enjoyment or appreciation of the sunlight-sensitive features of an historic or cultural resource.
- *Open space utilization:* a substantial reduction in the usability of open space as a result of increased shadow, including information regarding anticipated new users and the open space's utilization rates throughout the affected time periods.
- *For any sunlight-sensitive feature of a resource:* complete elimination of all direct sunlight on the sunlight-sensitive feature of the resource, when the complete elimination results in substantial effects on the survival, enjoyment, or, in the case of open space or natural resources, the use of the resource.

In general, a significant adverse shadow impact occurs when the incremental shadow added by a proposed action falls on a sunlight-sensitive resource and substantially reduces or completely eliminates direct sunlight exposure, thereby significantly altering the public's use of the resource or threatening the viability of vegetation or other resources.

III. PRELIMINARY SCREENING

Tier I Screening Assessment

According to the *CEQR Technical Manual*, the longest shadow that a structure could cast in New York City, except for periods close to dawn or dusk, is 4.3 times its height. The maximum shadow radius for the Proposed Development (580.5 feet) was determined using the Proposed Development's maximum height of approximately 135 feet, which includes bulkhead and rooftop mechanical equipment (Tier 1 Assessment).[1] Within this longest shadow study area, there are two potentially sunlight-sensitive open

[1] In accordance with *CEQR Technical Manual* guidance, the maximum shadow radius was calculated by combining the maximum building height of the Proposed Development, the proposed bulkhead, and rooftop mechanical equipment (approximately 135 feet) then multiplying that number by 4.3.

space resources. Therefore, further screening was warranted in order to determine whether any resources could be affected by project-generated shadows.

Tier II Screening Assessment

Due to the path of the sun across the sky in the northern hemisphere, no shadow can be cast in a triangular area south of any given project site. In New York City, this area lies between -108 and +108 degrees from true north. The purpose of the Tier 2 screening is to determine whether the sunlight-sensitive resources identified in the Tier 1 screening are located within portions of the longest shadow study area that can receive shade from the Proposed Development.

Figure E-1 provides a base map illustrating the results of the Tier 1 and Tier 2 screening assessments (i.e., the portion of the longest shadow study area lying within -108 degrees from the true north and +108 degrees from true north as measured from southernmost portions of the Development Site). A total of two open space resources were identified as sunlight-sensitive resources that warranted further assessment. A list of these resources is provided below in **Table E-1**.

TABLE E-1: Sunlight-Sensitive Resources Warranting Further Assessment Based on Tier I and II Screening

No.[1]	Sunlight-Sensitive Open Space Resources
1	25 Kent Avenue Privately Owned Public Space (POPS)
2	McCarren Park

Note: [1]Numbers keyed to **Figure E-1**

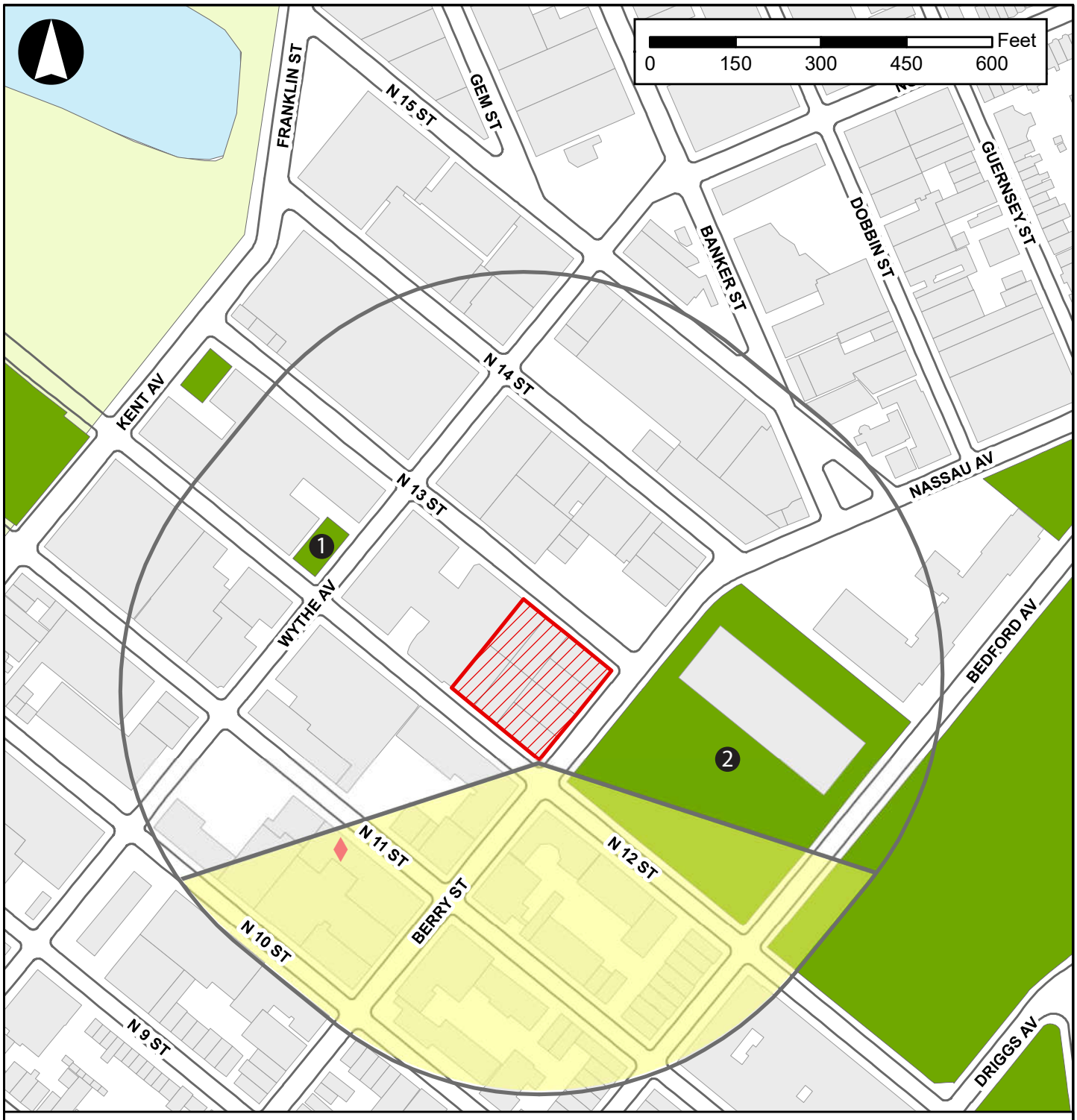
Tier III Screening Assessment

According to the *CEQR Technical Manual*, a Tier 3 screening assessment should be performed to determine if, in the absence of intervening buildings, shadows resulting from a proposed action can reach a sunlight-sensitive resource, thereby warranting a detailed shadow analysis. The Tier 3 screening assessment is used to determine if shadows resulting from a proposed action can reach a sunlight-sensitive resource at any time between 1.5 hours after sunrise and 1.5 hours before sunset on representative analysis dates.

As project-generated shadows could nearby sunlight-sensitive resources, a Tier 3 assessment was performed using three dimensional (3D) computer mapping software. A 3D model was used to calculate and display project-generated shadows on individual representative analysis dates. The model contained 3D representations of the elements in the base map used in the preceding assessments and a 3D model of the Proposed Development. Per *CEQR Technical Manual* guidance, at this stage of the assessment, surrounding buildings within the study area were not included in the model so that it may be determined whether project-generated shadows would reach any sunlight sensitive resources.

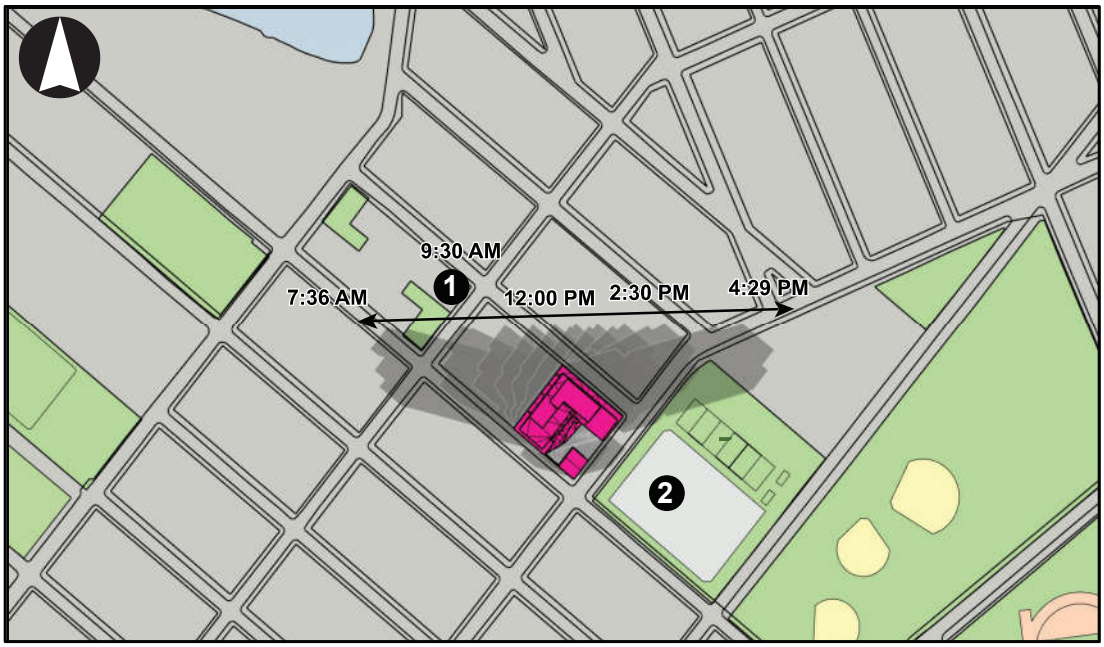
As shown in **Figures E-2a** and **E-2b**, the Tier 3 results determined that two sunlight-sensitive open space resources could potentially receive project-generated shadows on at least one of the four analysis days and, therefore require further analysis. **Table E-2** summarizes the Tier III assessment, showing the two sunlight-sensitive open space resources that could, in the absence of intervening buildings, receive project-generated shadows, and on which analysis days the new shadows would occur. As presented in **Table E-2**, the potential for incremental shadows to be cast on McCarren Park and the 25 Kent Avenue POPS on at least one of the four analysis days could not be ruled out. Therefore, a detailed shadows analysis is warranted for these two sunlight-sensitive resources.

Figure E-1
Tier 1 & 2 Shadows Assessment

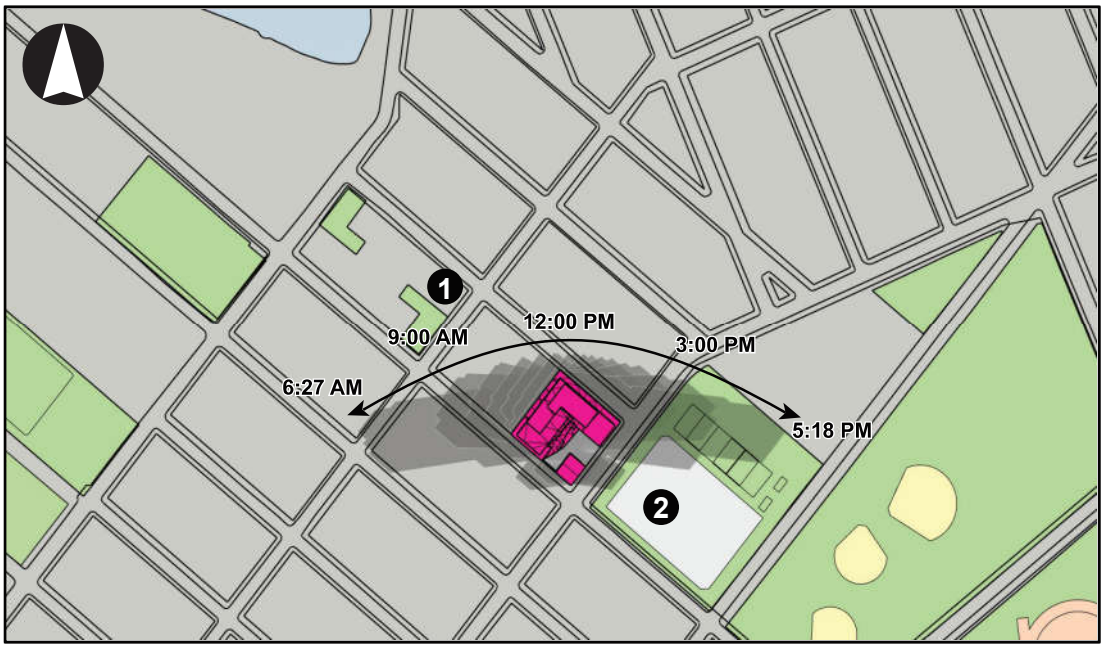


Legend

- Development Site
- Tier 1: Longest Shadow Study Area (580.5')
- Tier 2: Area That Cannot Be Shaded
- Existing Building Footprint
- LPC-Designated Individual Historic Landmark
- 1 Sunlight-Sensitive Resource
- Public Open Space
- Waterfront Public Access Area



MARCH 21/SEPTEMBER 21



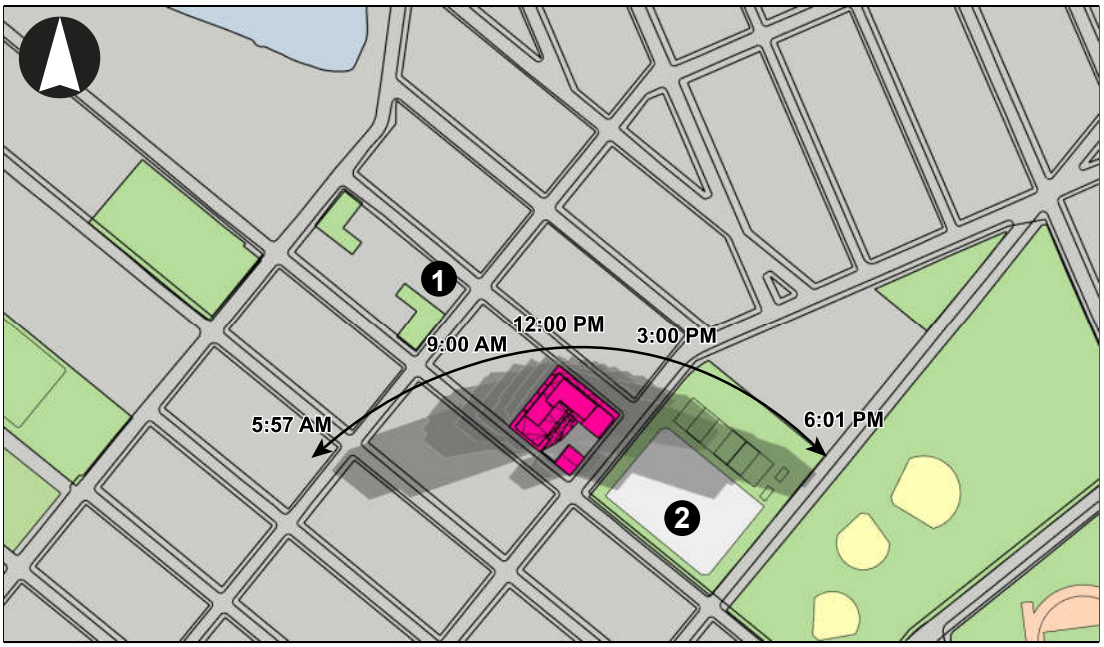
MAY 6/AUGUST 6

Proposed Development

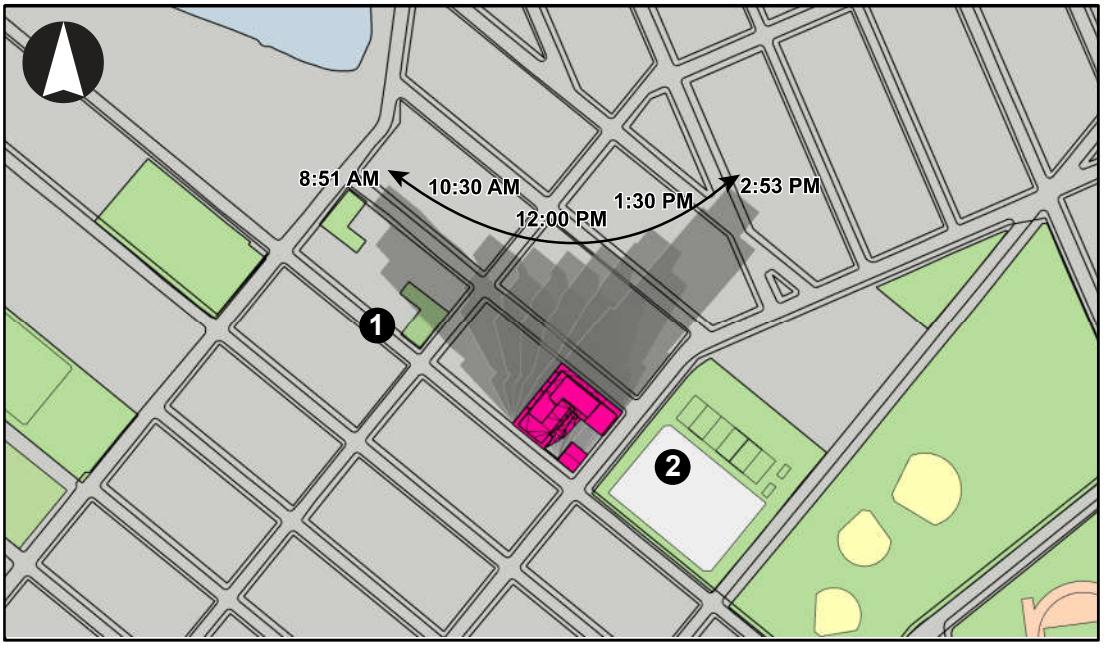
1 Sunlight-Sensitive Resource

Project-Generated Shadow

Note: Resources keyed to Table D-1



JUNE 21



DECEMBER 21

Proposed Development

1 Sunlight-Sensi ve Resource

Project-Generated Shadow

Note: Resources keyed to Table 6-1

TABLE E-2: Tier 3 Assessment Results

No.[1]	Resource	March 21/ Sept. 21 7:36 AM – 4:29 PM	May 6/ August 6 6:27 AM – 5:18 PM	June 21 5:57 AM – 6:01 PM	December 21 8:51 AM – 2:53 PM	Number of Analysis Days
1	25 Kent Avenue POPS	**NO**	**NO**	**NO**	**YES**	**1**
2	McCarren Park	**YES**	**YES**	**YES**	**NO**	**3**

Note: [1]Numbers keyed to **Figures E-2a and E-2b.**

IV. DETAILED ANALYSIS

Resources of Concern

25 Kent Avenue POPS

Completed in 2019, 25 Kent Avenue occupies an entire city block bounded by Kent Avenue to the west, Wythe Avenue to the east, North 13th Street to the north, and North 12th Street to the south (Block 2282, Lot 1). The development comprises roughly half a million square feet (485,034 gsf) and contains approximately 377,493 gsf of office space, approximately 43,792 gsf of ground-floor retail space, and approximately 63,749 gsf of light industrial space. This is the City's first IBIA development, which was approved in 2016.

The development also contains two public plazas: one situated on the southeast corner of Kent Avenue and North 13th Street and one on the northwest corner of Wythe Avenue and North 12th Street. Each plaza is approximately 7,200 sf (together comprising 14,400 sf of open space) and located on either end of the block. A publicly-accessible, 40-foot wide, pedestrian walkway connects the east-west portions of the development site and the aforementioned public plazas.

McCarren Park

McCarren Park is a 36.49-acre park bounded by North 12th Street and Bayard Street to the south, Berry Street and Bedford Avenue to the west, Manhattan Avenue and Lorimer Street to the north, and Leonard Street to the east. The park includes programming such as baseball fields, basketball courts, bocce courts, dog-friendly areas, fitness equipment, football fields, handball courts, an outdoor pool, playgrounds, recreation centers, running tracks, a skate park, soccer fields, spray showers, and tennis courts.

The portion of McCarren Park within the Tier I Longest Shadow Study Area is occupied by a large asphalt-paved blacktop and seven outdoor tennis courts. During the winter months, these tennis courts are covered by a temporary structure for indoor use.

Shadows Analysis

Per 2021 *CEQR Technical Manual* guidance, shadow analyses were performed for the two sunlight-sensitive resources identified above on each of the four representative days of the year: March 21/September 21 (the equinoxes); May 6/August 6 (the midpoint between the equinoxes and the solstices); June 21 (the summer solstice and the longest day of the year); and December 21 (the winter solstice and shortest day of the year). CEQR guidance define the temporal limits of a shadow analysis period to fall from 1.5 hours after sunrise to 1.5 hours before sunset. As discussed above, the results of

the shadows analysis show the incremental difference in shadow impact between the No-Action and With-Action conditions (see **Table E-3**).

As shown in **Table E-3**, incremental project-generated shadows would reach the two sunlight-sensitive resources identified in the Tier 3 assessment. Increases in shadow coverage would occur at the 25 Kent Avenue POPS on the December 21 analysis day. At McCarren Park, incremental shadows from the Proposed Development would occur over the open space resource on the March/September 21, May/August 6, and June 21 analysis days. **Figures E-3** through **E-6**, show representative shadow views for each sunlight-sensitive resource of concern on each of the four representative analysis days mentioned above.

It should be noted that, per the 2021 *CEQR Technical Manual*, all times reported herein are Eastern Standard Time and do not reflect adjustments for daylight savings time that is in effect from mid-March to early November. As such, the times reported in this chapter for March 21/September 21, May 6/August 6, and June 21 need to have one hour added to reflect the Eastern Daylight Saving Time.

TABLE E-3: Duration of Shadows on Sunlight Sensitive Resources (Increment Compared to No-Action)

Resource		Analysis Day			
		March 21/Sept. 21	**May 6/August 6**	**June 21**	**December 21**
		7:36 AM – 4:29 PM	**6:27 AM – 5:18 PM**	**5:57 AM – 6:01 PM**	**8:51 AM – 2:53 PM**
25 Kent Avenue POPS	Shadow enter-exit time	N/A	N/A	N/A	8:51 AM- 9:30 AM
	Incremental shadow duration	N/A	N/A	N/A	39 minutes
McCarren Park	Shadow enter-exit time	3:25 PM– 4:29 PM	3:11 PM – 5:18 PM	3:14 PM – 6:01 PM	N/A
	Incremental shadow duration	1 hour and 4 minutes	2 hours and 7 minutes	2 hours and 47 minutes	N/A

Note: All times are Eastern Standard Time; Daylight Savings Time was not accounted for per *CEQR Technical Manual* guidance.
Table indicates the entry and exit times and total duration of incremental shadow for each sunlight-sensitive resource.

March 21/September 21

On March 21/September 21 the time-period for shadows analysis begins at 7:36 AM and continues until 4:29 PM. March is considered the beginning of the growing season in New York City. September 21, which has the same shadow patterns as March 21, is also within the growing season. On the March 21/September 21 analysis day, incremental shadows from the Proposed Development would reach McCarren Park, but would not reach the 25 Kent Avenue POPs.

The Proposed Development would cast incremental shadows on McCarren Park beginning at 3:25 PM and continuing until the end of the analysis day, for a total duration of approximately 1 hour and 4 minutes. As indicated in **Figure E-3a**, a small incremental shadow would enter the open space from the western edge of the park near the tennis courts. Over the course of the afternoon, incremental shadows would move eastward. By the end of the analysis day, incremental shadows would cover a portion of the westernmost tennis court (refer to **Figure E-3b)**.

Figure E-3a
McCarren Park
Incremental Shadows on March 21/September 21



3:25 PM



3:55 PM

Proposed Development
Open Space
Incremental Shadow

Figure E-3b
McCarren Park
Incremental Shadows on March 21/September 21



4:25 PM

Proposed Development | **Open Space** | **Incremental Shadow**

May 6/ August 6

On May 6/August 6, the midpoint between the equinoxes and the solstices, the time-period for shadows analysis begins at 6:27 AM and continues until 5:18 PM. On this analysis day, incremental shadows from the Proposed Development would reach McCarren Park during the late afternoon hours.

The Proposed Development would cast incremental shadows on a portion of McCarren Park beginning at 3:11 PM and continue until 5:18 PM, for a duration of approximately 2 hour and 7 minutes. As shown in **Figure E-4a** through **Figure E-4c**, incremental shadows would enter the open space at 3:11 PM from the western edge of the park before moving east towards the tennis courts and asphalt-paved area. By approximately 4:45 PM incremental shadow coverage would reach the asphalt-paved area.

June 21

On June 21, which is the summer solstice and the day of the year with the longest period of daylight, the time-period for shadows analysis begins at 5:57 AM and continues until 6:01 PM. On this analysis day, the sun is most directly overhead and generally, shadows are shortest and move across the widest angular range from west to east. On this date, the Proposed Development would cast incremental shadows on McCarren Park.

The Proposed Development would cast incremental shadows on McCarren Park beginning at 3:14 PM and continuing until 6:01 PM, for a duration of approximately 2 hours and 47 minutes. As indicated in **Figure E-5a** through **Figure E-5c**, incremental shadows would enter a small portion of the open space from the western edge of the park at 3:14 PM, similar to the March/September 21 and May/August 6 analysis days, and proceed to the east gradually. By 6:01 PM, incremental shadow coverage would occur over the westernmost tennis courts and a portion of the asphalt-paved area.

December 21

On December 21, the winter solstice, the time-period for shadows analysis begins at 8:51 AM and continues until 2:53 PM. On this analysis day, which is the day of the year with the shortest period of daylight, the sun is at its lowest point and generally, shadows are at their longest. On this date the Proposed Development would cast incremental shadows on the 25 Kent Avenue POPS.

The Proposed Development would cast incremental shadow on 25 Kent Avenue POPS from 8:51 until 9:30 AM, approximately 39 minutes. As shown in **Figure E-6**, incremental shadow from the Proposed Development would be cast over small portions of the southeastern POPS at the 25 Kent Avenue development, which is occupied by benches and a pedestrian plaza.

Assessment

As described above, a shadow impact occurs when the incremental shadow from a proposed project falls on a sunlight sensitive resource or feature and reduces its direct sunlight exposure. Determining whether this impact is significant or not depends on the extent and duration of the incremental shadow and the specific context in which the impact occurs. For open spaces, the uses and features of the space indicate its sensitivity to shadows. Shadows occurring during cold-weather months generally do not affect the growing season of outdoor vegetation; therefore, this sensitivity is assessed for both (1) warm-weather dependent features, like wading pools and sandboxes, or vegetation that could be affected by loss of sunlight during the growing season (i.e., March through October); and (2) features, such as benches, that

Figure E-4a
McCarren Park
Incremental Shadows on May 6/August 6



3:11 PM



3:41 PM

Proposed Development
Open Space
Incremental Shadow

Figure E-4b
McCarren Park
Incremental Shadows on May 6/August 6



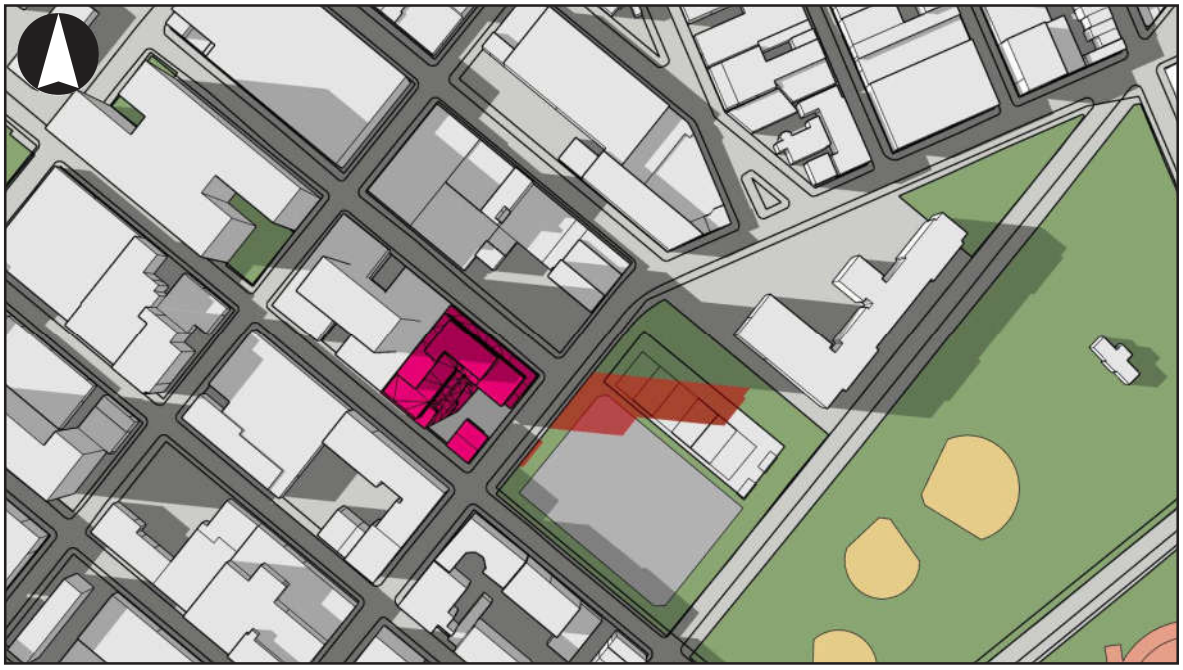
4:11 PM



4:41 PM

Proposed Development | **Open Space** | **Incremental Shadow**

Figure E-4c
McCarren Park
Incremental Shadows on May 6/August 6



5:11 PM

Proposed Development
Open Space
Incremental Shadow

Figure E-5a
McCarren Park
Incremental Shadows on June 21



3:44 PM



4:14 PM

Proposed Development | **Open Space** | **Incremental Shadow**

Figure E-5b
McCarren Park
Incremental Shadows on June 21



4:44 PM



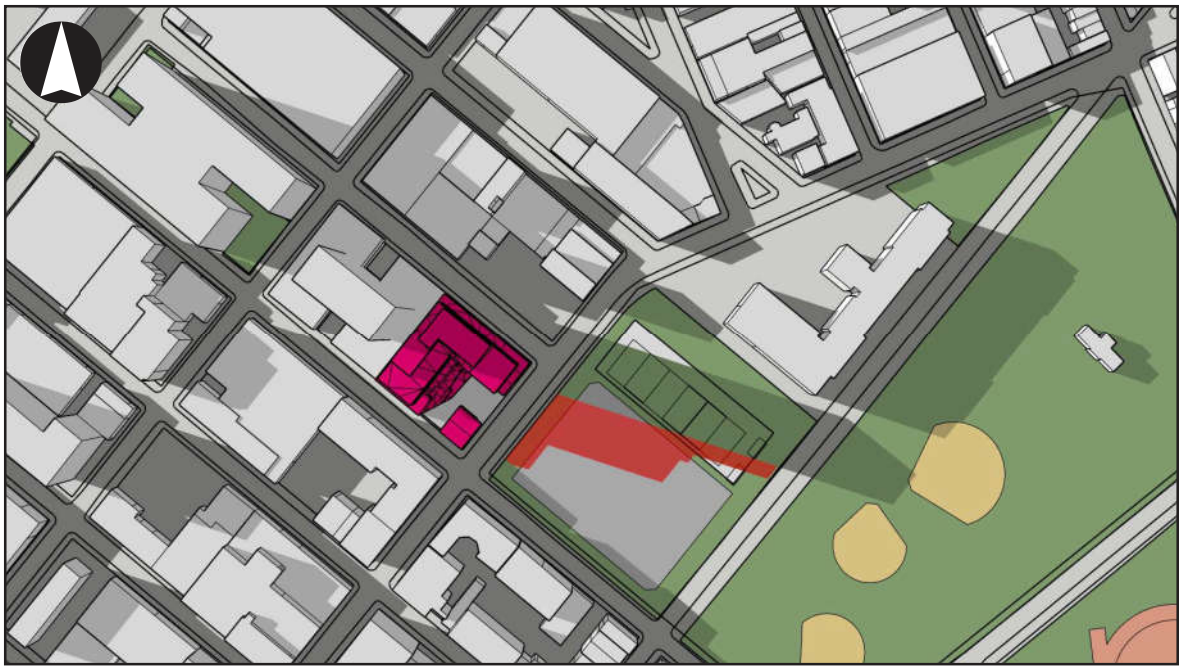
5:14 PM

Proposed Development | **Open Space** | **Incremental Shadow**

Figure E-5c
McCarren Park
Incremental Shadows on June 21



5:44 PM



6:01 PM

Proposed Development
Open Space
Incremental Shadow

Figure E-6
25 Kent Avenue POPS
Incremental Shadows on December 21



8:51 AM



9:21 AM

Proposed Development | **Open Space** | **Incremental Shadow**

could be affected by a loss of winter sunlight. Uses that rely on sunlight include: passive use, such as sitting or sunning; active use, such as playfields or paved courts; and such activities as gardening, or children's wading pools and sprinklers. Vegetation requiring direct sunlight includes the tree canopy, flowering plants, and plots, particularly plots for food production in community gardens. The amount of sunlight typically considered to be the minimum that plantings and vegetation would need is six to eight hours of direct sunlight. However, certain plantings and vegetation can tolerate partial sun, with a reduced minimum requirement of four to six hours of direct sunlight. Examples of areas that can tolerate partial sun are established tree canopies, shrubs or perennials. Consequently, the assessment of an open space's sensitivity to increased shadow focuses on identifying the existing conditions of its facilities, plantings, and uses, along with the sunlight requirements for each.

25 Kent Avenue POPS

The Proposed Development would cast incremental shadows on the 25 Kent Avenue POPS on one of the four representative analysis days (December 21). On the December 21 analysis day, incremental shadows from the Proposed Development would occur for approximately 39 minutes (8:51-9:30 AM). As shown in **Figure E-6**, incremental shadows would cover small portions of the POPS during this time. Due to the limited size and duration of incremental shadow, the Proposed Development is not expected to result in significant adverse shadows impacts to the 25 Kent Avenue POPS.

McCarren Park

The Proposed Development would cast incremental shadows on McCarren Park on three of the four representative analysis days (refer to **Table E-3**). Incremental shadow coverage would range between 1 hour and 4 minutes on the March/September 21 analysis day and 2 hours and 47 minutes on the June 21 analysis day. As shown in **Figures E-3** through **E-6**, shadow coverage would be confined to a small portion of the western edge of the park that features tennis courts and asphalt-paved areas. The duration and size of incremental shadows are not expected to have a significant effect on the utilization or enjoyment of this resource. Most incremental shadows during the March/September 21, May/August 6, and June 21 analysis days would affect the McCarren Park Tennis Center which consists of seven tennis courts located on the western-most portion of the park and are moderately utilized. It should be noted that the tennis courts are bubbled during the indoor season, roughly between Columbus Day and April 27, and therefore recreational use of the tennis courts would not be affected by project-generated shadows during this period. Additionally, it is expected that the open space would still obtain adequate sunlight during the plant growing season (at least the six- to eight-hour minimum specified in the *CEQR Technical Manual*), and any future features dependent on sunlight would not be affected. Furthermore, project-generated shadows would be limited to a small portion of the open space's 36.49 total acres and would not have a noticeable effect on the use and character of this resource as a whole. Therefore, incremental shadows from the Proposed Development are not expected to result in significant adverse impacts to McCarren Park.

Project-Generated Public Open Space

As discussed in **Attachment A, "Project Description,"** the Proposed Actions would facilitate the development of an approximately 9,690 sf publicly accessible open space ("PAA space") (of which, includes a 4,800-sf public plaza), which will be accessed via Berry, North 12th, and North 13th Streets, and would feature bench seating, tables, tree plantings, and landscaped and planted areas. As noted above, per CEQR methodology, the project-generated shadows on the proposed PAA space cannot cause

significant adverse shadow impacts, because without the Proposed Actions these public open space areas would not exist. However, an assessment of shadow effects on these spaces was conducted and described herein for informational purposes.

During the spring, summer, and fall, the project-generated PAA space would be mostly-to-partly shaded by both existing nearby structures and the Proposed Development in the mid- to late-afternoon hours due to the location of the project-generated PAA space on the eastern portion of the Development Site; however, due to the location of McCarren Park and the lack of tall structures immediately east of the Development Site, shadow coverage over the project-generated PAA space during the morning and early-afternoon hours would be less, and would therefore receive more sunlight. During the winter, when shadows fall northwest in the morning, north at midday, and northeast in the afternoon, the PAA space would be mostly in the sun throughout the day. While the Proposed Development and existing nearby structures would cast incremental shadows on the project-generated PAA space on all four representative analysis days, shadow coverage over the proposed PAA space would not affect the usability or enjoyment of the open space.

ATTACHMENT F

URBAN DESIGN AND VISUAL RESOURCES

I. INTRODUCTION

In an urban design assessment, pursuant to the 2021 *City Environmental Quality Review (CEQR) Technical Manual*, one considers whether and how a project may change the experience of a pedestrian in the study area. The assessment focuses on the components of a project that may have the potential to alter the arrangement, appearance, and functionality of the built environment, as experienced by pedestrians in the study area. The components considered include building bulk, use, and type; building arrangement; block form and street pattern; streetscape elements; street hierarchy; and natural features.

This attachment assesses the potential effects on urban design and visual resources that could result from the Proposed Actions. The analysis addresses each of the urban design characteristics for existing conditions and the future without and with the Proposed Actions for the analysis year of 2025. As detailed in **Attachment A, "Project Description,"** the Proposed Actions include a zoning map amendment, a zoning text amendment to designate the Development Site as an Industrial Business Incentive Area (IBIA), and a special permit available to projects within an IBIA. The Proposed Actions would facilitate the development of an approximately 283,433-gsf, 135-foot-tall (roof height) mixed-use building (the "Proposed Project") on the Development Site (Block 2283, Lots 25, 28, 31, 33, 35, 38, 41 and 43) which would contain commercial uses (offices, local retail, and restaurant) and light industrial space required under the special permit. The Proposed Actions would apply solely to the Development Site.

II. METHODOLOGY

Urban design is the totality of components that may affect a pedestrian's experience of public space. These components include streets, buildings, visual resources, open space, natural features, and wind and sunlight conditions. These elements, as defined in the *CEQR Technical Manual*, are described below:

- Streets. The arrangement and orientation of streets define the location and flow of activity in an area, set street views, and create the blocks on which buildings and open spaces are organized. The apportionment of street space between cars, bicycles, transit, and sidewalk areas is critical to making a successful streetscape, as is the careful design of street furniture, grade, materials used, and permanent fixtures, including plantings, street lights, fire hydrants, curb cuts, or newsstands.

- Buildings. Buildings support streets. A building's street walls form the most common backdrop in the city for public space. A building's size, shape, setbacks, lot coverage, placement on the zoning lot and block, the orientation of active uses, and pedestrian and vehicular entrances all play major roles in the vitality of the streetscape. The public realm also extends to building facades and rooftops, offering more opportunity to enrich the visual character of an area.

- Visual Resources. A visual resource is the connection from the public realm to significant natural or built features, including views of the waterfront, public parks, landmark structures or districts, otherwise distinct buildings or groups of buildings, or natural resources.

- Open Space. For the purpose of urban design, open space includes public and private areas such as parks, yards, cemeteries, parking lots and privately owned public spaces.

- Natural Features. Natural features include vegetation and geologic, topographic, and aquatic features. Rock outcroppings, steep slopes or varied ground elevation, beaches, or wetlands may help define the overall visual character of an area.

- Wind. Channelized wind pressure from between tall buildings and down washed wind pressure from parallel tall buildings may cause winds that jeopardize pedestrian safety.

In general, an assessment of urban design is needed when a project may have effects on one or more of the elements that contribute to the pedestrian experience, which are described above. Pursuant to the *CEQR Technical Manual*, projects that permit modification of yard, height, and setback requirements, and projects that result in an increase in built floor area beyond what would be allowed as-of-right, or in the future without the Proposed Actions, require preliminary analysis. As described in **Attachment A, "Project Description,"** the Proposed Actions involves a zoning map amendment, zoning text amendment, and a special permit. The proposed zoning map amendment would rezone the Development Site (Block 2283, Lots 25, 28, 31, 33, 35, 38, 41 and 43) from M1-1 to M1-2, and the proposed zoning text amendment would modify Zoning Resolution Section (ZR §) 74-96 to designate the Development Site as a new Industrial Business Incentive Area (IBIA). If certain use, design, envelope, and urban design findings are met, the designation would allow the Applicant to seek a special permit only available in IBIAs to allow an increase in floor area beyond the 2.0 FAR permitted for commercial and industrial uses of the underlying M1-2 district. In addition, under the IBIA special permit, the City Planning Commission (CPC) may also modify parking and loading requirements if certain findings are met. As such, a preliminary urban design and visual resources analysis is warranted.

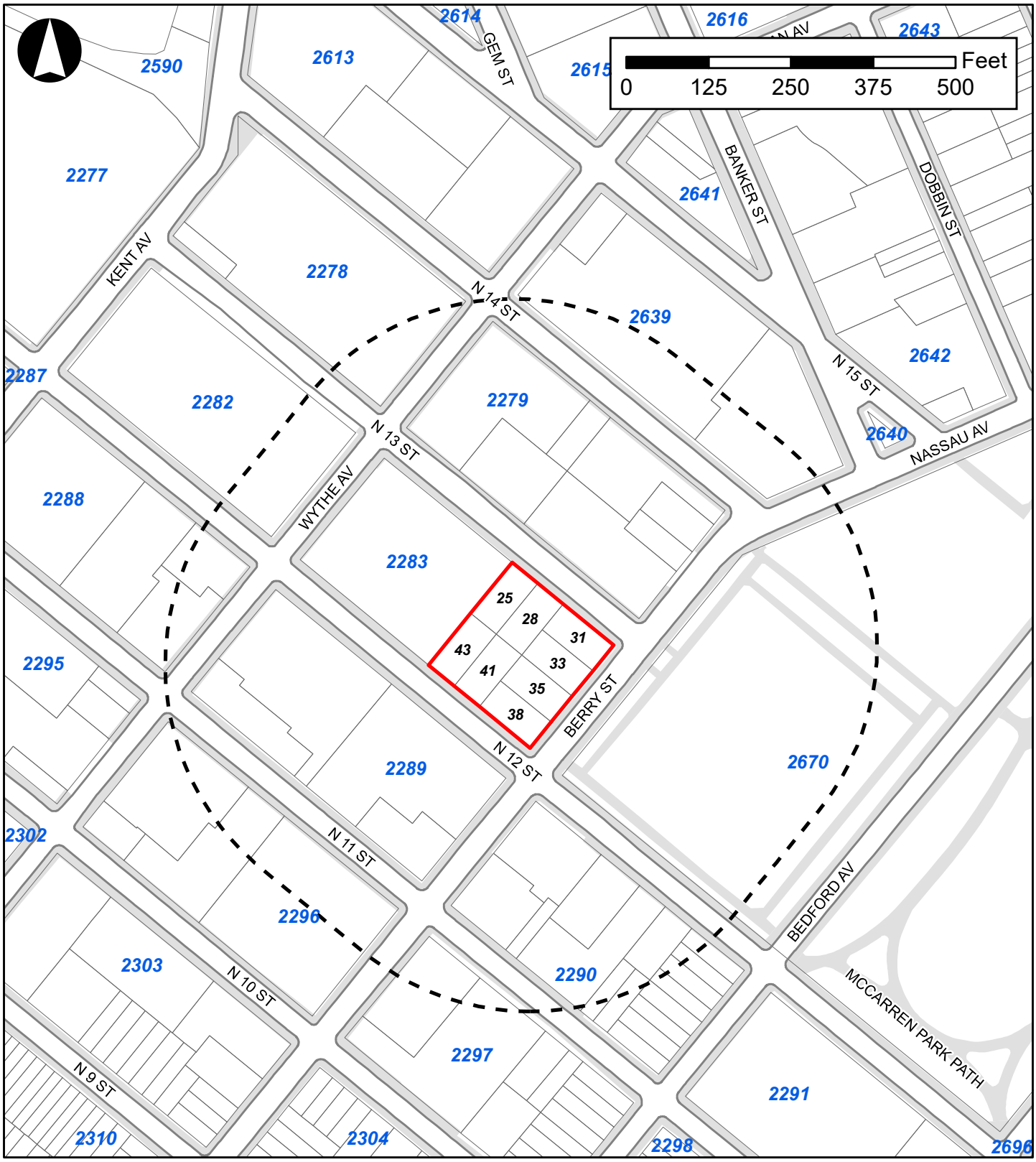
Per criteria of Section 230 of the *CEQR Technical Manual*, a wind condition analysis is not required for the Proposed Actions. CEQR states that high wind conditions in New York City typically happen along waterfronts, or other locations at or in close proximity to waterfront sites where prevailing winds from the waterfront are not attenuated by buildings or natural features. The Development Site is located over 1,000 feet east of the Bushwick Inlet in the Greenpoint neighborhood in North Brooklyn. Additionally, the Proposed Project would involve the construction of a ten-story building on an existing block, and would therefore not exacerbate pedestrian wind conditions in the area. As such, a wind analysis is not warranted for the Proposed Actions.

Study Area

As defined in the *CEQR Technical Manual*, the urban design and visual resources study area consists of the area where the project may influence land use patterns and the built environment. Shown in **Figure F-1**, the primary study area is coterminous with the Development Site while the secondary study area generally extends approximately 400 feet from the boundary of the proposed IBIA (i.e., the Development Site). The secondary study area is generally bound by North 14th Street, Bedford Avenue, North 11th Street, and Wythe Avenue. **Figures F-2a** through **F-2c** provide photographs of the Development Site and surrounding area.

The following analysis is based on field visits, photographs, aerial views, and other graphic images of the Development Site and surrounding study area. Zoning calculations, including floor area calculations, building heights, and lot coverage information are also provided for the Development Site and, where applicable, the study area.

Study Areas



Source: NYCDCP (PLUTO 2021, Version I); DoITT (2020)

Legend

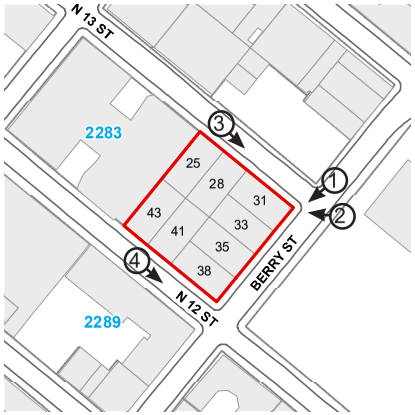
- Primary Study Area (Development Site)
- Secondary Study Area (400-Foot Radius)
- 3499 Blocks
- 24 Lots

Figure F-2a

Site Photos - Taken 09/30/2021



1) Looking southwest along Berry Street from N 13 Street. Development Site at right.





2) Looking west toward the Development Site from the intersection of Berry Street and N 13 Street.

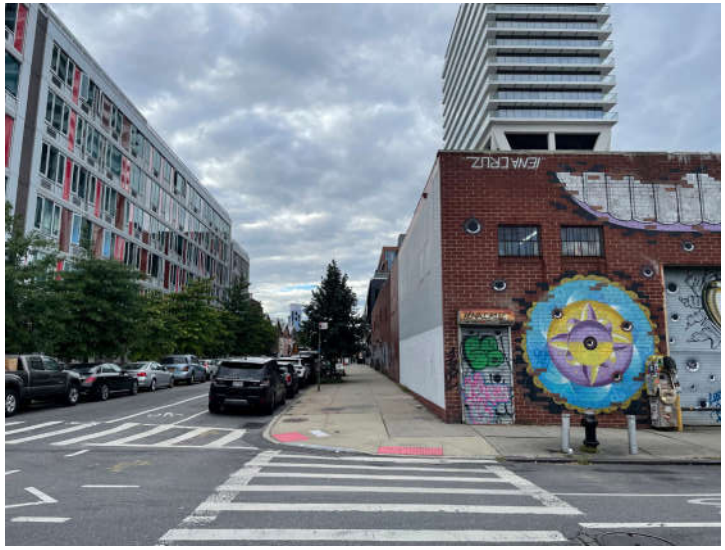


3) Looking southeast along N 13 Street between Wythe Avenue and Berry Street. Development Site at right.

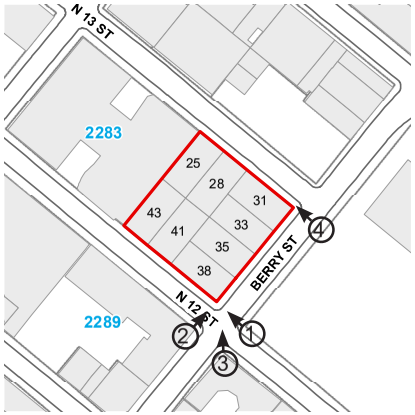


4) Looking southeast along N 12 Street between Wythe Avenue and Berry Street. Development Site at left.

Figure F-2b
Site Photos - Taken 09/30/2021



1) Looking northwest along N 12 Street from Berry Street. Development Site at right.

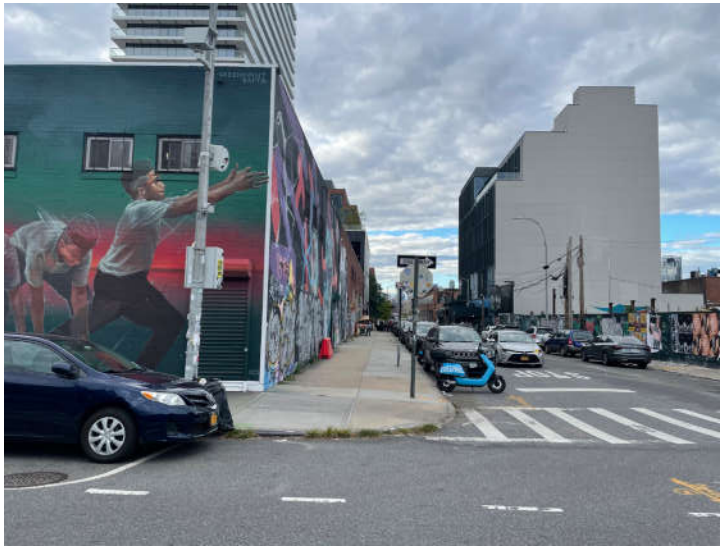




2) Looking northeast along Berry Street from N 12 Street. Development Site at left.



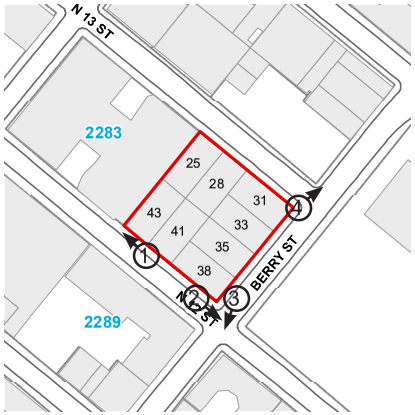
3) Looking north toward the Development Site from the intersection of Berry Street and N 12 Street.



4) Looking northwest along N 13 Street from Berry Street. Development Site at left.



1) Looking northwest along N 12 Street between Wythe Avenue and Berry Street. Development Site at right.





2) Looking southeast along N 12 Street from intersection with Berry Street. Development Site behind.



3) Looking southwest along Berry Street from intersection with N 12 Street. Development Site behind.



4) Looking northeast along Berry Street from intersection with N 13 Street. Development Site behind.

III. EXISTING CONDITIONS

Urban Design

Primary Study Area (Development Site)

The approximately 40,000-sf Primary Study Area (Block 2283, Lots 25, 28, 31, 33, 35, 38, 41 and 43) is located on the boarder between the Greenpoint and Williamsburg neighborhoods of Brooklyn Community District (CD) 1. The block is bound by North 13th Street, Berry Street, North 12th Street, and Wythe Avenue (refer to **Figure F-1)**. Eight rectangular lots, each occupied with a single-story warehouse/light industrial building, comprise the Development Site (see discussion of No-Action conditions below for further details). Each lot is approximately 5,000 sf with a minimum of 50 feet of frontage along Berry, North 12th, and/or North 13th streets (Lots 31 and 38 each have 50 feet frontage along Berry Street, as well as 100 feet of frontage along Norther 13th and North 12th streets, respectively).

Buildings

As detailed in **Attachment C, "Land Use, Zoning, and Public Policy,"** and as described above, the Development Site is occupied by eight, single-story warehouse/light industrial buildings which were built in 1991. As shown in **Figure F-2a**, these buildings cover the entirety of each lot (resulting in a built FAR of 1.0) and are built to the lot line.

Streets & Streetscape

A generally regular rectilinear street grid, with east-west streets spaced 200 feet apart and north-south avenues spaced 400 to 450 feet apart, characterizes the area immediately surrounding the Primary Study Area. North of the Development Site is North 13th Street, a two-way narrow street with parking lanes on both sides. East and south of the Development Site are Berry Street and North 12th Street, respectively. Both are narrow, one-way streets with one protected bike lanes and parking along both curbs. Concrete sidewalks surround the Development Site on all three sides (shown in **Figure F-2b**) and range between 11 and 13 feet in width. Streetscape elements found on the sidewalk includes standard streetlight and signage in addition to street trees along North 12th Street.

Natural Features & Open Space

The topography of the area directly in front of the Development Site is generally flat. From Wythe Avenue to Berry Street along North 13th Street, the project slopes upwards 3.58 feet from 10.87 feet to 14.39 feet North American Vertical Datum of 1988 (NAVD 88). There are no natural features or open space resources located on the Development Site.

Secondary Study Area (400-Foot Radius)

Buildings

As detailed in **Attachment C, "Land Use, Zoning, and Public Policy,"** the predominant land uses within the secondary study area include an assortment of light industrial/manufacturing uses, commercial/office uses, mixed-use commercial/residential uses, and parking uses (refer to **Figure C-2** in **Attachment C "Land Use, Zoning, and Public Policy"**). In addition, a portion of McCarren Park is located within the southeastern boundary of the secondary study area. Current land uses in the 400-feet secondary study area reflect both longstanding manufacturing and industrial buildings (though some of which have been

converted to commercial/office uses) and some new construction. Since the 2005 Greenpoint-Williamsburg Rezoning was implemented, many former industrial/manufacturing buildings in the secondary study area have been converted to commercial/office uses. Examples of these industrial to commercial conversions include the building located at 131 North 14th Street, which was constructed in 1931 and altered in 2008 for use as a photo studio, and the building located at 4 Berry Street, which was constructed in 1920 and altered in 2009 to accommodate retail space.

In addition to building conversions, there have been several new buildings constructed within the secondary study area. New building completions include the 22-story, 250-feet tall William Vale Hotel which was completed in 2016 (see **Figures F-2a** and **F-2b**) and 25 Kent Avenue – a 10-story, 134-feet tall mixed-use building completed in 2019 which was the first IBIA project. In addition, at 221 North 14th Street, also known as 1 Nassau Avenue, an existing one- and two-story commercial and manufacturing building has been expanded (see photo no. 4 in **Figure F-2c**). At 103 North 13th Street, a new seven-story mixed-use building is under construction and will introduce new commercial and light industrial space to the secondary study area (see photo no. 4 in **Figure F-2b**).

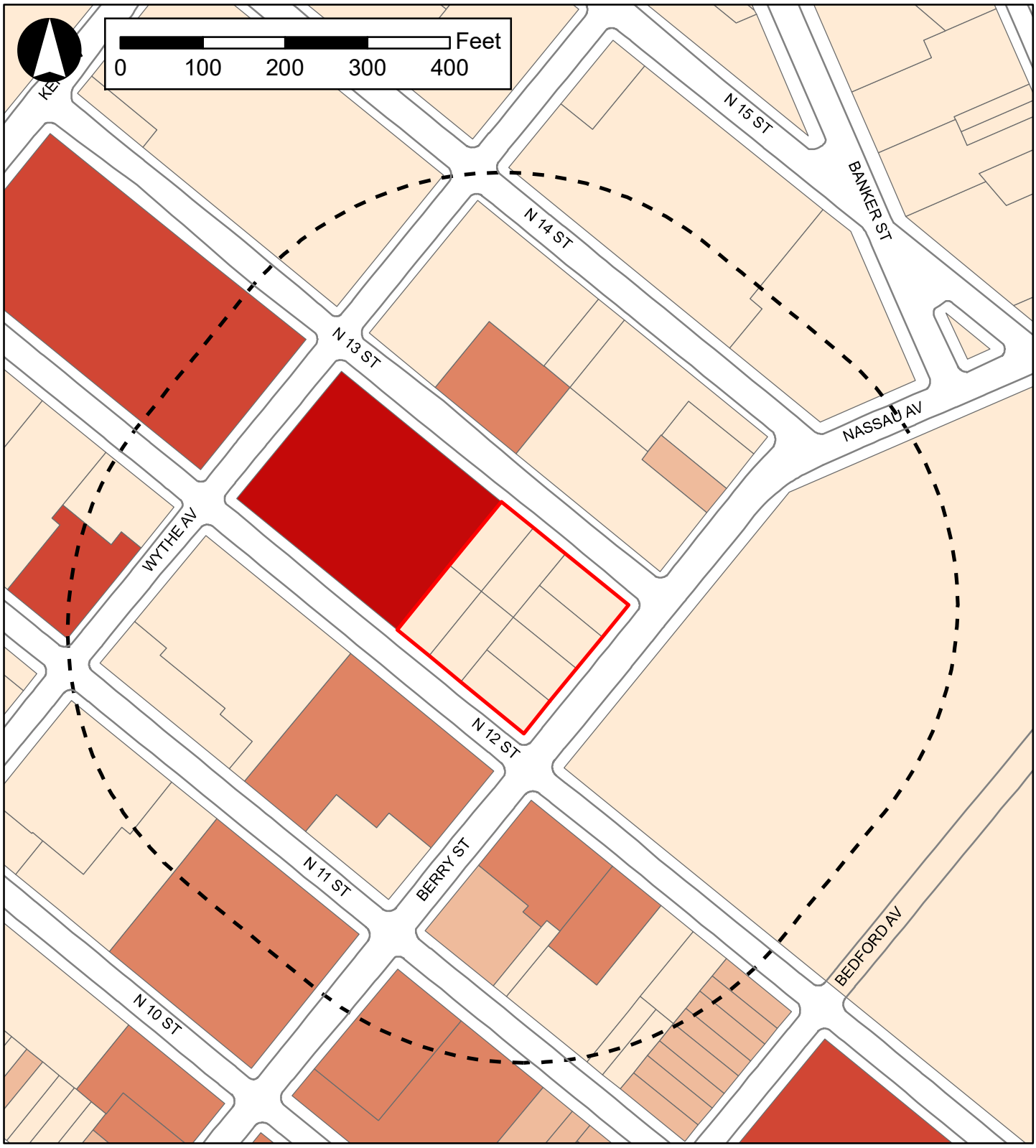
As shown in **Figures F-2c**, the majority of buildings in the secondary study area are built to the lot lines, creating continuous street walls throughout much of the secondary study area. As shown in **Figure F-3**, many buildings within the secondary study area are one- to three-stories tall, with taller buildings (containing more than six stories) located to the south and west of the Development Site (see also photos 2 and 3 of **Figure F-2c**). As shown in **Figure F-4**, these taller buildings are also generally the buildings with the highest built density in the secondary study area and they range in built FAR, where older manufacturing buildings (some converted for commercial use) have an FAR between 1.0 and 2.0 while newly-constructed buildings have a higher FAR between 4.0 and 8.0 (refer to **Figure F-4**). The older industrial/manufacturing buildings tend to be built from either brick or cinder block (see photo 1 of **Figure F-2c**).

Streets & Streetscape

As previously discussed, the configuration of the street grid in the 400-foot study area creates generally regular block sizes. The majority of streets in the secondary study area are narrow, roads that carry local traffic with parking lanes on both sides of the street. However, Berry Street, which runs parallel to the East River and operates one-way northbound, bends at North 14th Street following the shape of McCarren Park's western edge. North of this bend, Berry Street becomes Nassau Street and continues to operate one-way northbound. Both Berry Street and Nassau Avenue feature a protected bike lane along their western sides. West of the Development Site is Wythe Avenue which is parallel to and has a similar bend as Berry Street, but operates one-way southbound. In the southern portion of the 400-foot radius is North 11th Street, a one-way, eastbound street which is a designated local truck route. Just outside of the secondary study area's western boundary, the east-west numbered streets either terminate at Kent Avenue (North 11th through North 14th Streets) or extend to the waterfront area (North 12th through North 14th Streets).

All of the streets in the 400-foot study area are flanked by concrete sidewalks with street lights. Street trees can be found along several of the streets in the vicinity of recent developments and/or building renovations or conversions. Curb cuts are more commonly found in the northern portion of the study area on east-west streets, though curb cuts do exist on the north-south thoroughfares. Protected bike lanes are located along North 11th, North 12th, and Berry Streets, as well as Wythe Avenue. A CitiBike station can be found at the intersection of Bedford Avenue and North 12th Street, on the east side of the secondary study area, while several others can be found just outside the 400-foot radius at the

Figure F-3
Building Heights



Source: NYCDCP (PLUTO 2021, Version I); DoITT (2020)

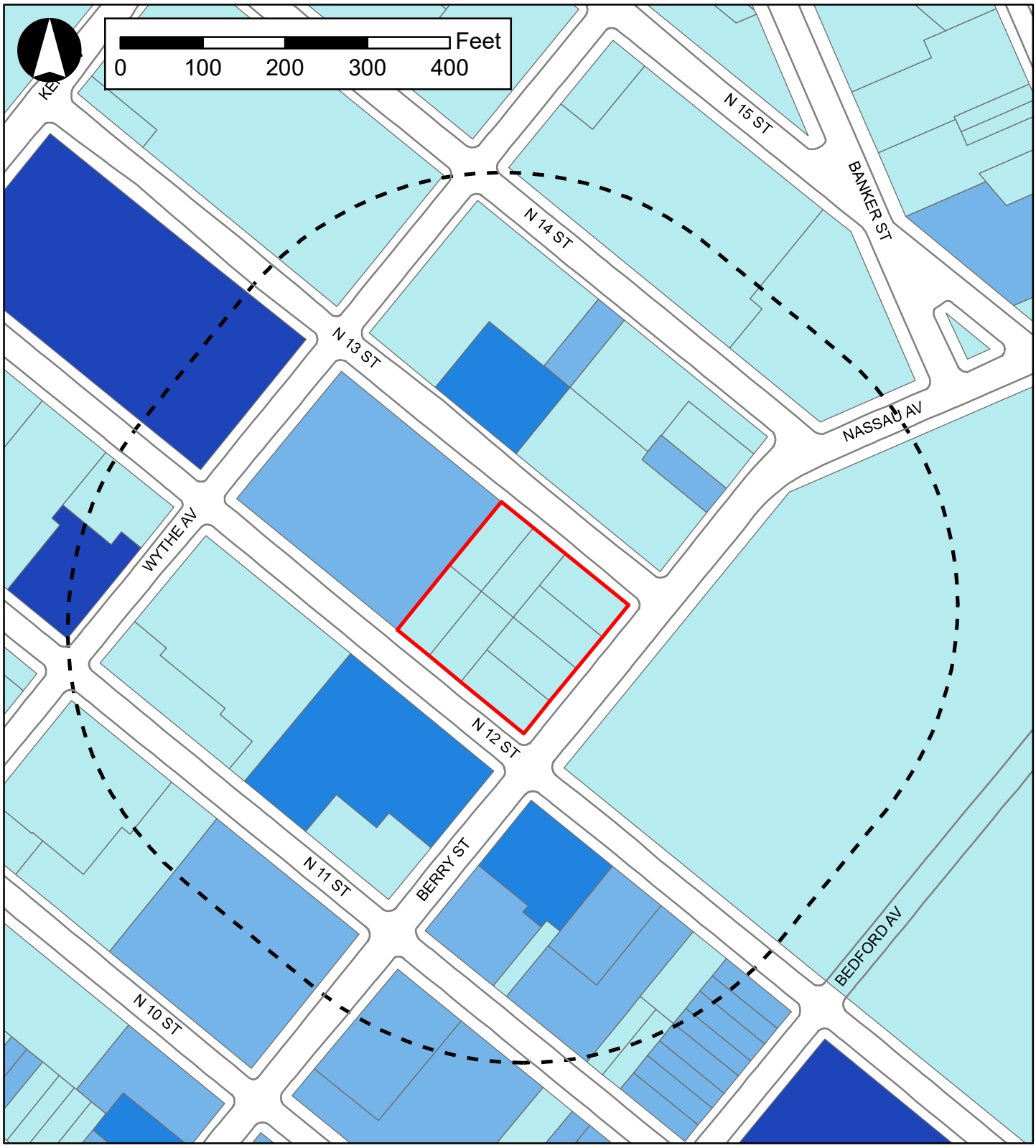
Legend

- Primary Study Area (Development Site)
- Secondary Study Area (400-Foot Radius)

# of Floors

- 1 - 3 Floors
- 4 - 5 Floors
- 6 - 7 Floors
- 8 - 10 Floors
- 11+ Floors

Figure F-4
Building Densities



Source: NYCDCP (PLUTO 2021, Version I); DoITT (2020)

Legend

- Primary Study Area (Development Site)
- Secondary Study Area (400-Foot Radius)

Built FAR

- Up to 2.0 FAR
- 2.1 - 4.0 FAR
- 4.1 - 6.0 FAR
- 6.1 - 8.0 FAR
- 8.1+ FAR

intersection of North 11th Street and Kent Avenue and the intersection of North 15th Street and Wythe Avenue.

Natural Features & Open Space

The topography of the 400-foot study area is generally flat, with a gradual slope upward from the Bushwick Inlet waterfront to the inland blocks of the secondary study area. In the eastern portion of the secondary study area is McCarren Park. This portion of the park is paved with tennis courts and a concrete area is used for events such as softball, baseball, kickball, and basketball. The other open space in the study area is the plaza located underneath the William Vale Hotel and one of the Privately Owned Public spaces (POPS) on the 25 Kent property. There are no notable natural features within the secondary study area.

Visual Resources

Primary Study Area (Development Site)

There are no visual resources located within the Primary Study Area. Obscured views of the Manhattan skyline are visible from the sidewalk adjacent to the Primary Study Area when facing west along North 12th Street or North 13th Street (refer to photos 1, 2, and 3 of **Figure F-2b** and photo 1 of **Figure F-2c**), but are not visible from Berry Street. Views of McCarren Park are visible from all sides of the Primary Study Area when facing east.

Secondary Study Area (400-Foot Radius)

Obscured views of the Manhattan skyline are visible from the secondary study area when looking west from all east-west streets in the study area. McCarren Park is visible when looking east, as well as from Berry Street which operates north-south.

IV. FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION CONDITION)

Urban Design

Primary Study Area (Development Site)

As discussed in **Attachment A, "Project Description,"** in the future without the Proposed Actions, the No-Action Reasonable Worst Case Development Scenario (RWCDS) is that all eight structures within the Development Site would remain in their existing condition; however, based on real estate trends in the area, the six currently unoccupied buildings would be converted to commercial retail uses. As in the existing condition, all eight lots would continue to be occupied by one-story masonry structures, built to the full 1.0 FAR. This provides a baseline condition to identify the effects of the Proposed Actions.

Secondary Study Area (400-Foot Radius)

Buildings

As detailed in **Attachment C, "Land Use, Zoning, and Public Policy,"** two projects are anticipated to be completed in the secondary study area in the future without the Proposed Actions: a commercial and industrial building (103 North 13th Street) and a seven-story mixed-use building (29 Wythe Avenue). At

103 North 13th Street, the development will consist of ground-floor retail, a second floor that will host light manufacturing uses, and the remaining five stories will be used for office space. Other amenities on the site include 142 parking spaces, bicycle storage, and recreational terraces. The proposed IBIA development at 29 Wythe Avenue will be seven stories (110 feet) containing office, light industrial uses, local retail, and TV/music production space. It will also include 62 accessory parking spaces.

Streets & Streetscape

Under the No-Action condition, it is anticipated that street trees will be planted around any new development sites within the secondary study area, in keeping with City requirements. One new curb cut is expected to be created as a part of the 103 North 13th Street development and two are expected to be created as part of the 29 Wythe Avenue development. No other curb cuts are expected to be created in the secondary study area and no other changes to streets or streetscapes are expected in the secondary study area in the future without the Proposed Actions.

Natural Features & Open Space

There are no natural features in the 400-foot study area and no new natural features are expected in the future without the Proposed Actions. In addition, the existing open spaces within the 400-foot study area would be unaffected under the No-Action condition and would remain as described above.

Visual Resources

Primary Study Area (Development Site)

There are no visual resources within the Development Site itself, and no new visual resources are expected to be introduced within the primary study area in the absence of the Proposed Actions.

Secondary Study Area (400-Foot Radius)

No changes to visual resources are anticipated within the 400-foot study area under No-Action conditions.

V. FUTURE WITH THE PROPOSED ACTIONS (WITH-ACTION CONDITION)

As detailed in **Attachment A, "Project Description,"** the Proposed Actions include a zoning map amendment, zoning text amendment, and application for a special permit. The proposed zoning map amendment would rezone the Development Site (Block 2283, Lots 25, 28, 31, 33, 35, 38, 41 and 43) from M1-1 to M1-2, and the proposed zoning text amendment would modify ZR § 74-96 to designate the Development Site as a new IBIA. Together, these amendments allow the Applicant to seek a special permit already existing in the ZR and available in IBIAs. The application for the special permit includes: (i) to increase the FAR by providing required industrial land use and modifications to public plaza requirements and (ii) modify loading and parking controls to waive a portion of the required accessory parking and reduce required loading berths from seven to two.

Under the IBIA special permit, if certain design, envelope, and urban design findings are met and provided that such a development or enlargement does not include a transient hotel or certain other types of commercial uses, the CPC may increase the permitted floor area by 3.5 sf above the base 2.0 FAR for commercial and industrial uses of the underlying M1-2 zoning district. In addition, the CPC may also

modify parking, loading, and public plaza requirements for every 1-sf of floor area set aside for Required Industrial Uses, if certain findings are met.

Conditions of the special permit states that Required Industrial Uses shall occupy a minimum of 5,000 sf of contiguous floor area and shall be served by loading areas and freight elevators with sufficient capacity. The special permit establishes urban design guidelines to accommodate increased densities of appropriate land uses in the Greenpoint and Williamsburg neighborhoods. The guidelines include:

- The height of a building or other structure, or portion thereof, located within ten feet of a wide street or fifteen feet of a narrow street shall not exceed a maximum base height of 75 feet. Beyond ten feet of a wide street or fifteen feet of a narrow street, the height of a building or other structure may not exceed a maximum building height of 110 feet, or 135 feet where a public plaza is provided on the zoning lot.

- Streetwalls shall be located on the street line and shall extend to a base height of 40 (minimum) to 75 (maximum) feet or the height of the building (whichever is less) provided that at least 70 percent of the aggregate width of the street wall below 12 feet shall be located at the street line location requirements. Additionally, on the short end of a block frontage, up to 130 feet of street walls may be set back from the street line to accommodate a public plaza, and a streetwall located at the street line that occupies less than 40 percent of the short end of the block frontage may rise without setback to the maximum building height.

- Ground-floor-level street and ground-floor-level walls fronting a public plaza of a development or horizontal enlargement shall be glazed with transparent materials which may include show windows, transom windows, or glazed portions of doors. These shall occupy at least 50 percent of the surface area of such street walls, measured between a height of two feet above the level of the adjoining sidewalk or open area and a height of 12 feet above the level of the first finished floor above curb level. The floor level behind such transparent materials shall not exceed the level of the windowsill for a depth of at least four feet, as measured perpendicular to the street wall.

- Rear yard requirements shall not apply to any development or enlargement on a through lot.

- Minimum sidewalk width requirements of 15 feet along the full frontage of the zoning lot.

- Parking and loading modifications in IBIAs, including reducing or waiving off-street parking requirements, inclusive, not including bicycle parking, and loading berth requirements, inclusive, provided that such reduction or waiver would not create or contribute to serious traffic congestion or unduly inhibit vehicular and pedestrian movement. The number of curb cuts provided are the minimum required and are located to cause minimum disruption to traffic, and the streets providing access to the development or enlargement are adequate to handle the traffic generated thereby, or provision has been made to handle such traffic.

The Proposed Project would be built in accordance with the bulk controls set forth in the special permit. As such, the Development Site would be redeveloped with a 10-story (135-foot-tall), approximately 283,433-gsf commercial and manufacturing building (4.8 FAR) comprised of 184,561 gsf of commercial floor area (3.8 FAR) (of which includes 124,224 gsf of office space, 47,171 gsf of retail space, and 13,166 gsf of restaurant space), 32,990 gsf of industrial use (0.8 FAR), and 65, 882 gsf of parking and mechanical space (0.2 FAR), as well as 9,690 sf publicly accessible open space ("PAA space") with frontages along Berry, North 12th, and North 13th streets. Compared to No-Action conditions, the Proposed Actions would result in development that would increase the built FAR from 1.0 to 4.8, and rise in building height from

approximately 20-feet-tall to 135-feet-tall. An assessment of the Proposed Actions' effect on urban design and visual resources is described in further detail below.

Urban Design

The development facilitated by the Proposed Actions would be built on an existing block, and would not entail any changes to topography, street pattern and hierarchy, block shapes, or natural features on the proposed Development Site or in the secondary study area. As detailed in **Attachment A, "Project Description,"** under With-Action conditions, the proposed zoning map amendment, zoning text amendment, and a special permit would be implemented at the Development Site, facilitating the development of the Proposed Project (a mixed-use building containing office, local retail, restaurant, and Required Industrial Uses).

Primary Study Area (Development Site)

Buildings

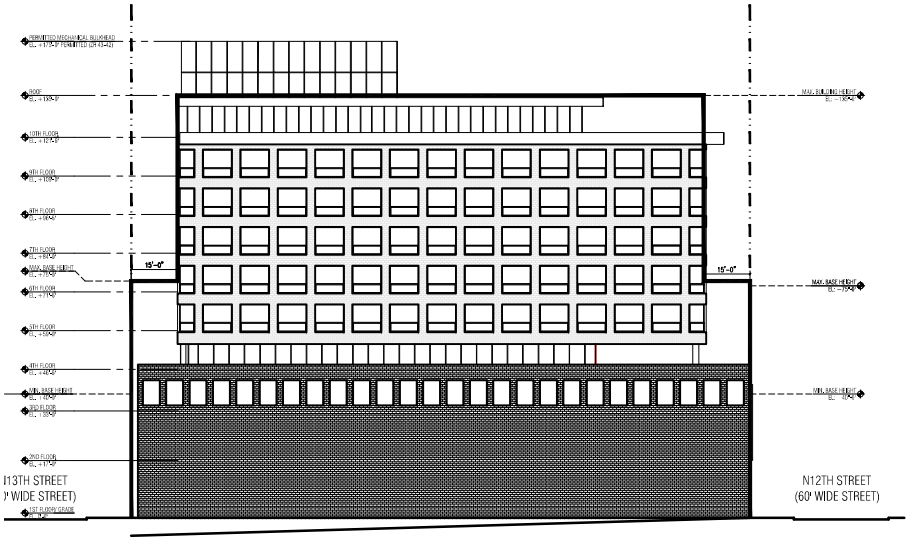
In the future with the Proposed Actions, the Development Site would be improved with a ten-story, 135-foot tall (roof height), approximately 283,433-gsf building with an FAR of 4.8 (i.e., the Proposed Project). The Proposed Project would be built in accordance with the IBIA special permit, including the bulk requirements set forth in the special permit text and would meet the site design, envelope, and urban design requirements applicable to developments making use of the special permit.

Per the proposed special permit requirements, the Proposed Project's street walls would be located along the street line on Berry, North 12th, and North 13th Streets, rising to a maximum base height of four stories (approximately 46 feet, 6 inches). After reaching the maximum base height, the building will setback 15 feet from the street line and continue to rise to its final roof height of 135 feet (154 feet including the permitted mechanical bulkhead) (refer to **Figure F-5**). **Figures F-6a** and **F-6b** provide aerial views of the Development Site comparing the No-Action and With-Action development scenarios, as well as the max and proposed roof and base heights. **Figures F-7a** through **F-7e** provide illustrative views of the Development Site comparing the No-Action and With-Action development scenarios. As shown in these figures, the With-Action scenario, would introduce a new building and alter the visual setting of the Development Site. However, in comparison to the No-Action scenario, the With-Action scenario would be compatible with the surrounding built environment.

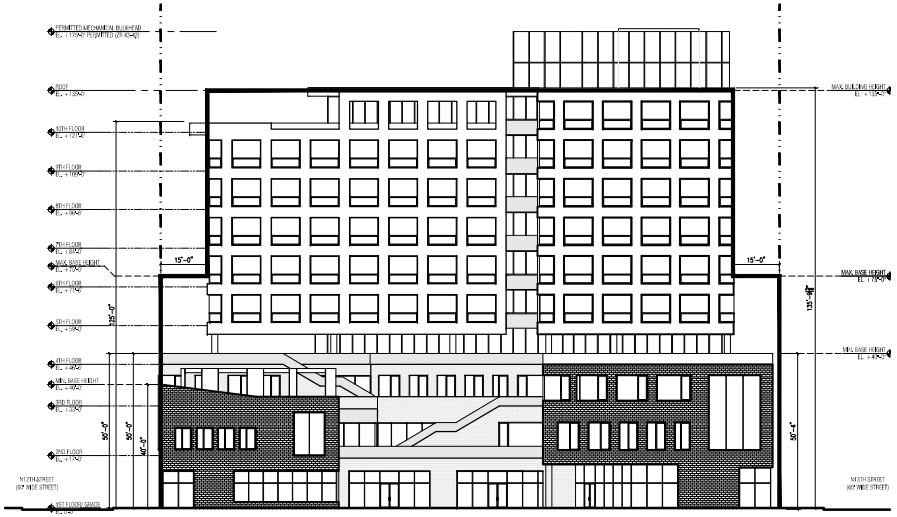
As the study areas include buildings ranging in height from low-to-high-rise. The Proposed Project's height would be within the range of the area's built environment and would be consistent with other developments in the area. Furthermore, it would be roughly half the height of the 22-story, 250-foot tall William Vale Hotel directly adjacent to the Development Site. Although not all developments in the study area consist of streetwall buildings, it is the predominant building form particularly for smaller lots. Accordingly, the Proposed Project's streetwall would be compatible with existing streetwalls, including those of the neighboring building on North 12th and 13th Streets (i.e., the eastern portion of the William Vale). Therefore, the proposed design would be in keeping with the built environment of the surrounding area.

Streets & Streetscape

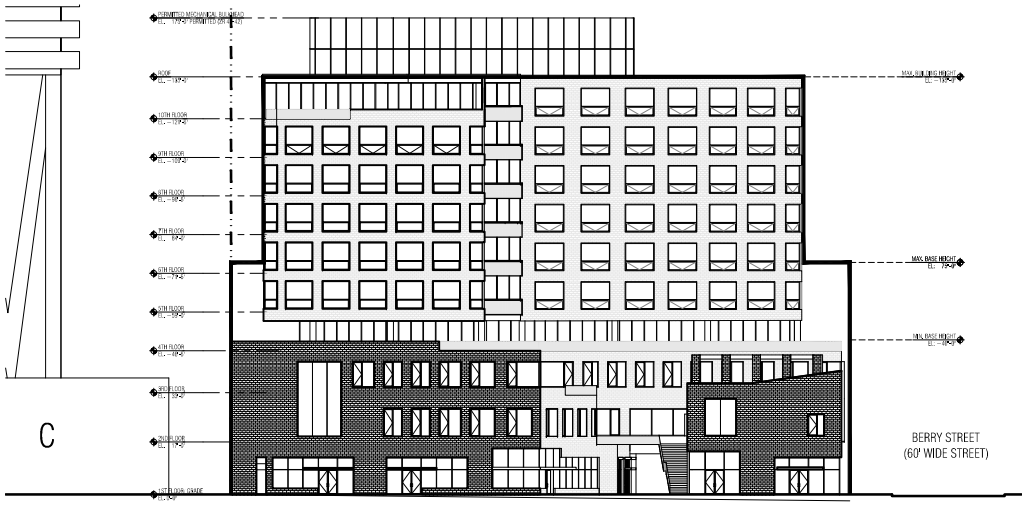
The Proposed Actions and Proposed Project would not change the configuration of the existing blocks. Consistent with the proposed special permit requirements, the sidewalks fronting the Development Site would be at least 15 feet in width (currently the sidewalks range from approximately 13 to 15 feet). New



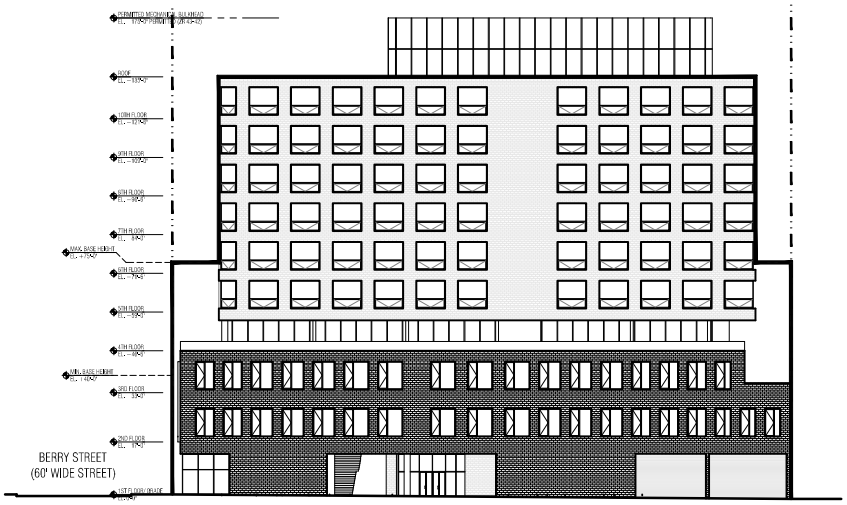
1 NORTH ELEVATION
1/16" = 1'-0"



2 SOUTH ELEVATION
1/16" = 1'-0"



3 WEST ELEVATION
1/16" = 1'-0"



4 EAST ELEVATION
1/16" = 1'-0"

20 Berry Street IBIA EAS

Figure F-5

Preliminary Elevations (For Illustrative Purposes Only)



Figure F-6a
No-Action Aerial View

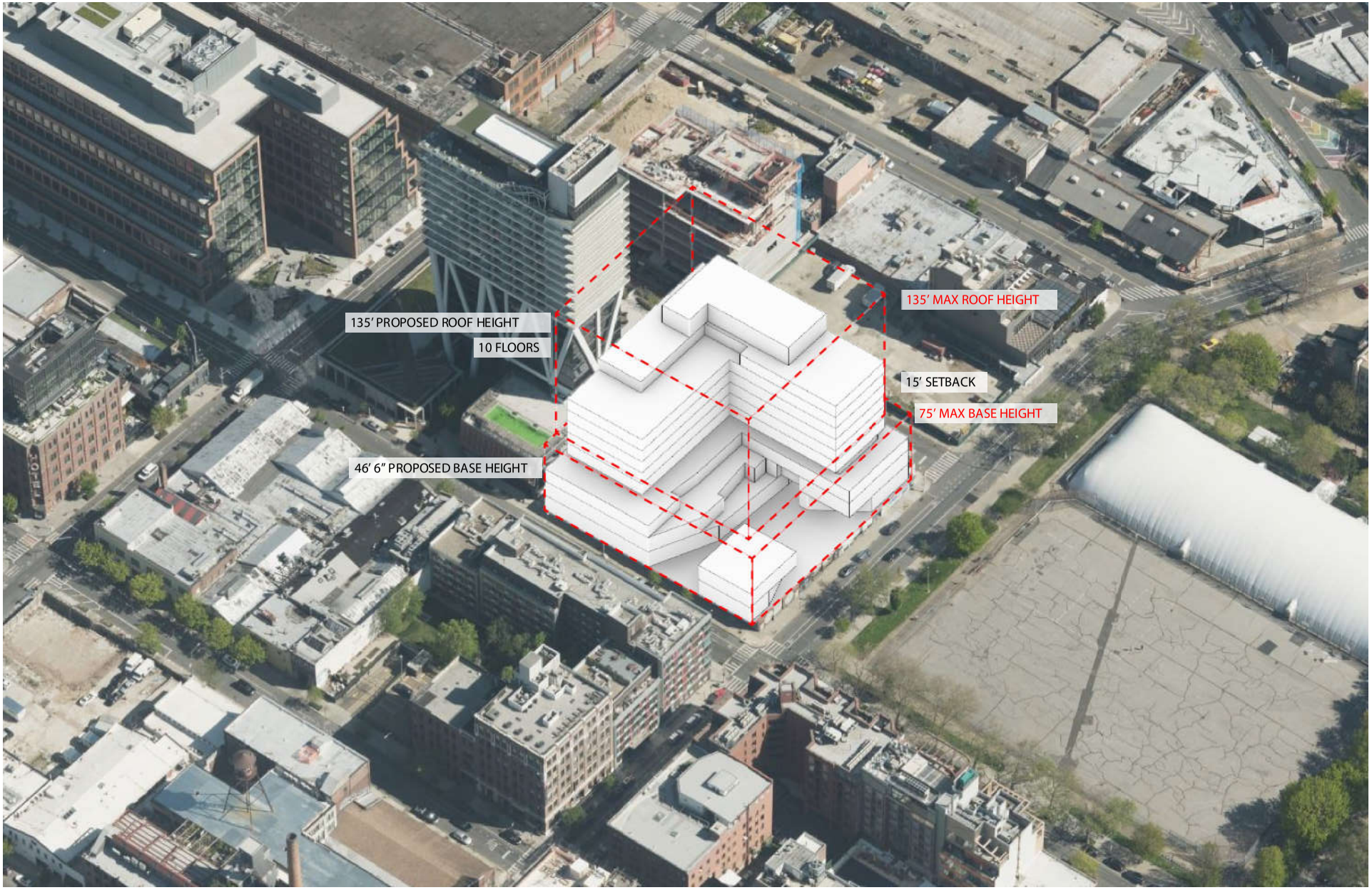
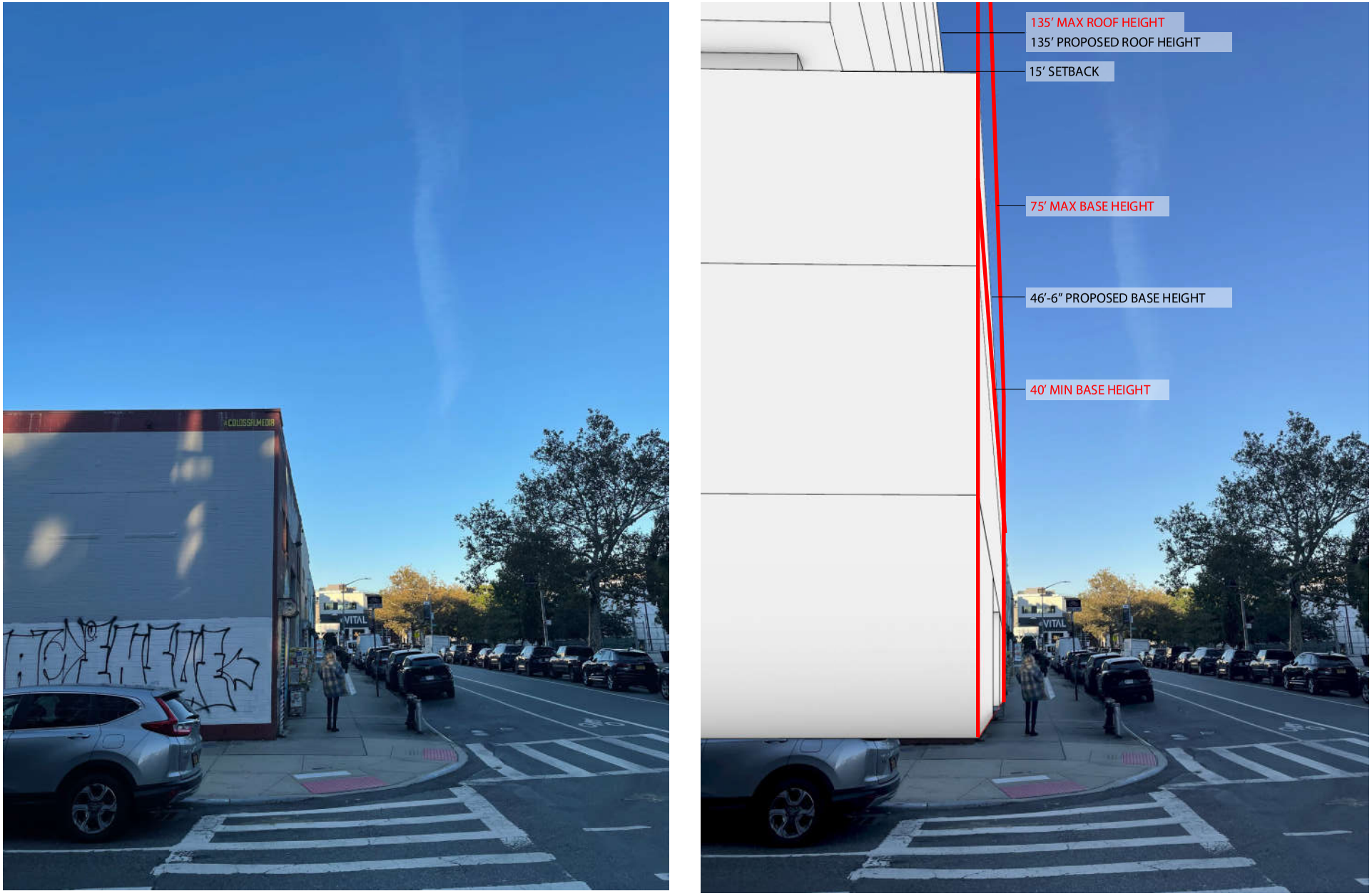


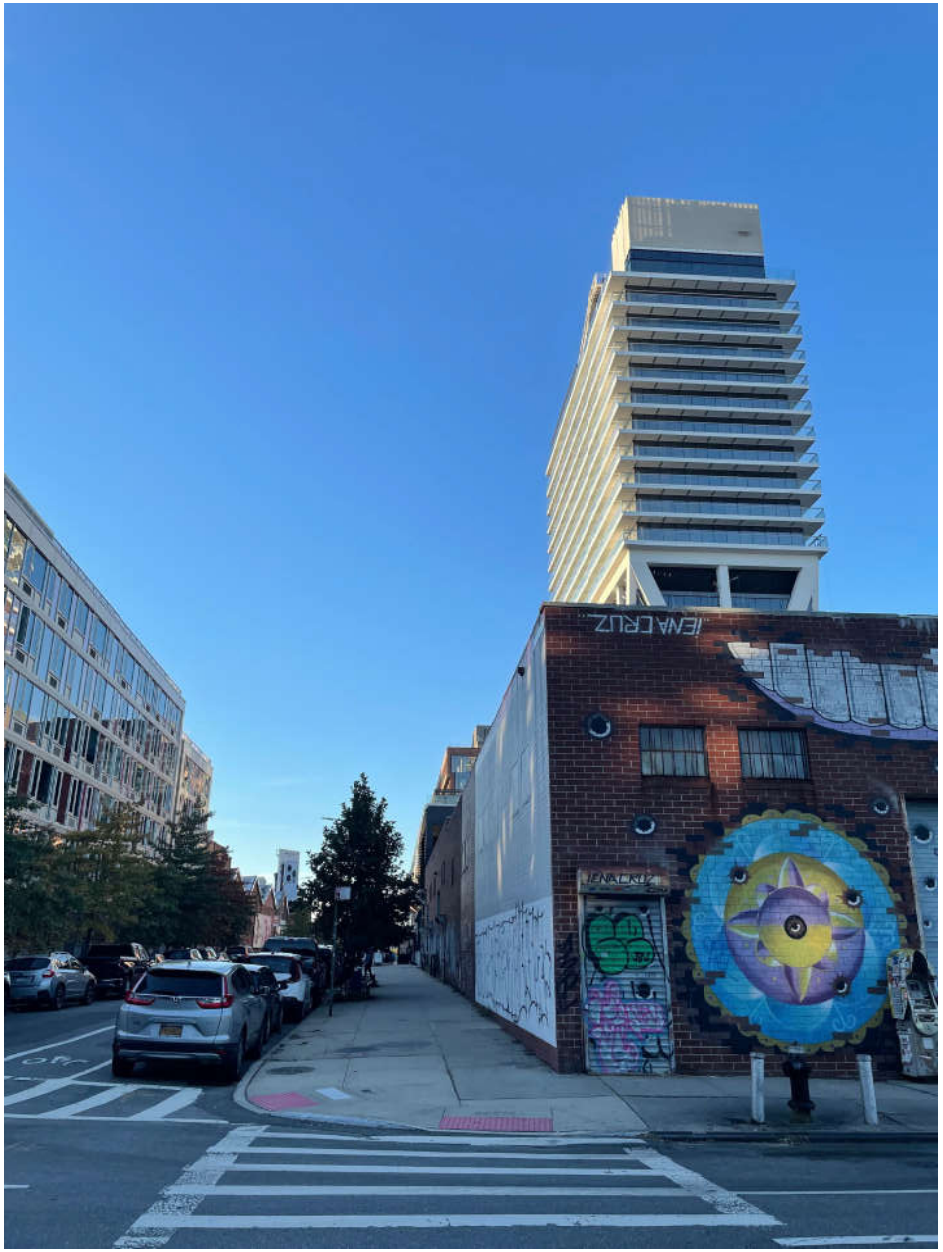
Figure F-6b
With-Action Aerial View

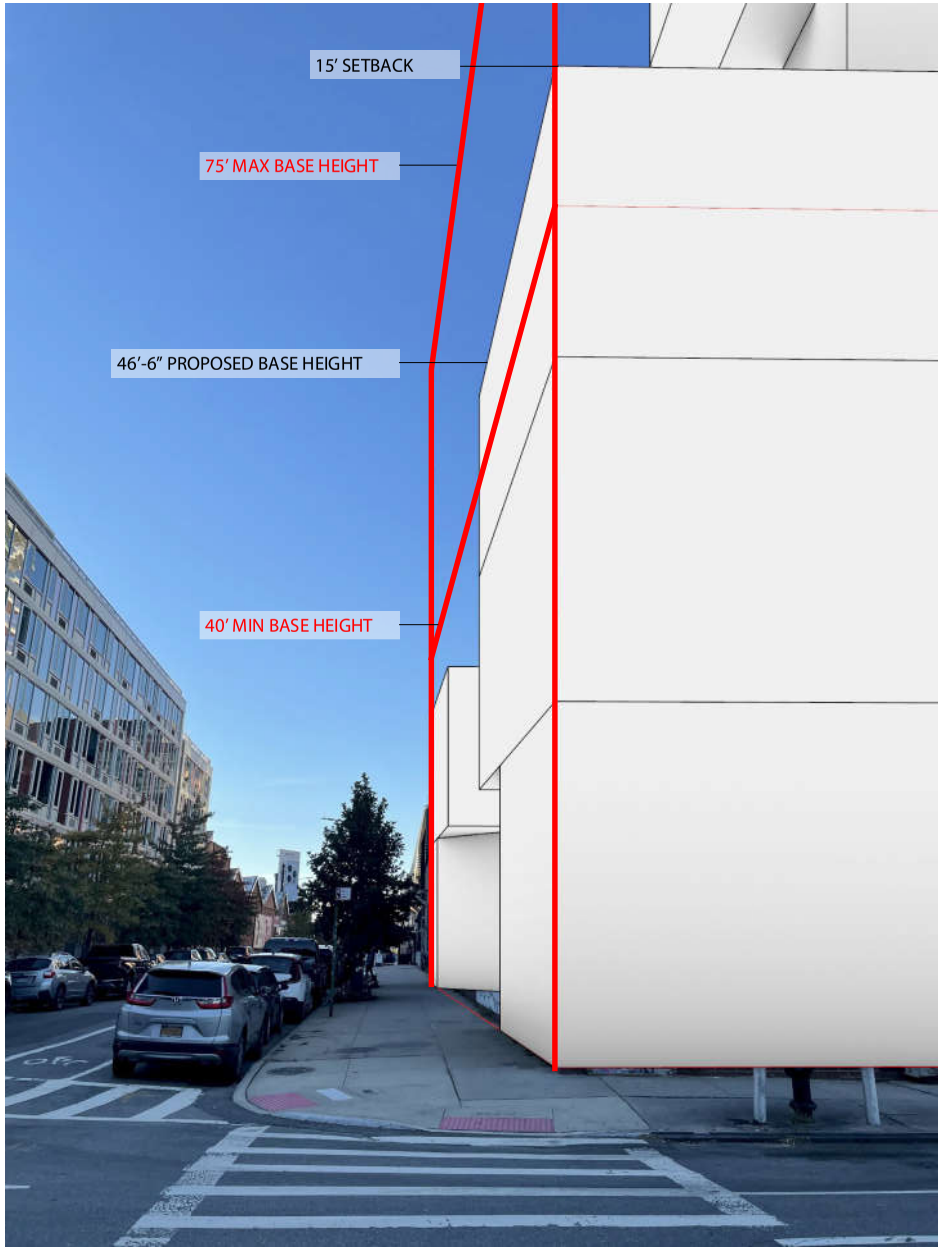


Looking southwest along Berry Street from intersection with N 13 Street. Development Site at right.



Looking northeast along Berry Street from intersection with N 12 Street. Development Site at left.





Looking northwest along N 12 Street between Wythe Avenue and Berry Street. Development Site at right.



Looking southeast along N 12 Street between Wythe Avenue and Berry Street. Development Site at left.



Looking southwest along N 13 Street between Wythe Avenue and Berry Street. Development Site at right.

street trees, planted along sidewalk adjacent to the Development Site in compliance with ZR 26-41 and would provide shade to pedestrians. Additionally, the ground-floor retail spaces and public plaza would add visual interest to the area, further enhancing the pedestrian experience. The design includes a through-block passage connecting Berry Street, North 12th Street, and North 13th Street (refer to **Figure F-8a** through **F-8b**). This passage complements similar through-block connections at the William Vale Hotel and 25 Kent, adding to the fine grain pedestrian scale characteristic of new development on North 12th Street. In addition, the building facade would comply with IBIA transparency requirements, which are intended to provide an articulated, visually interesting exterior that connects the pedestrian to the retail interior from the outside (refer to **Figure F-8c**).

As discussed above, the Proposed Actions would enable the Applicant to modify building bulk regulations within the Development Site. However, the Proposed Actions would not allow the Proposed Project to exceed 4.8 FAR. As such, the With-Action development would not be out of scale with the surrounding neighborhood's existing and anticipated future building fabric. As such, the Proposed Actions are not anticipated to result in any significant adverse impacts to urban design, but, as the Proposed Project would replace the existing, single-story, brick warehouse buildings, the Proposed Project would complement and improve the urban design of the area.

Natural Features & Open Space

As discussed previously, the Development Site currently contains no natural features; however, the Proposed Project would result in the creation of a new publicly accessible open space in the form of the 4,800-sf plaza. It would primarily be located along Berry Street with auxiliary entrances off North 12th and North 13th Streets and would improve landscaping and the pedestrian environment on these streets by strengthening the connection between McCarren Park and the north Williamsburg open spaces on the East River and the Brooklyn waterfront greenway. In addition, the landscape design and plant palette would speak to the site's proximity to the historic footprint of Bushwick Inlet by referencing lowland ecologies.

Secondary Study Area (400-Foot Radius)

Buildings

Development as a result of the Proposed Actions would result in a new, 10-story (135-foot-tall) commercial and industrial building (4.8 FAR) generally built to the lot lines within the Development Site, similar to other developments in the secondary study area. It is anticipated that the two development projects described above (103 North 13th Street and 29 Wythe Avenue) that are within the secondary study area would be completed by the 2025 analysis year. There are no other development projects planned within the secondary study area that are anticipated to be completed by the 2025 analysis year.

The Proposed Project would be consistent with newly-constructed buildings within the secondary study area, which generally have a built FAR ranging from 4.0 to 8.0, and include the 22-story, 250-feet-tall William Vale Hotel, the 10-story, 134-feet-tall 25 Kent Avenue (which served as the first IBIA project), and the seven-story mixed-use buildings at 103rd 13th Street (which is currently under construction) and 29 Wythe Avenue (both of which are also IBIA projects).



Looking north through N 12 Street pedestrian passageway towards Development Site.



Looking west from Berry Street towards Development Site and public plaza.



Looking northwest from Berry Street and N 12 Street towards Development Site.

Streets & Streetscape

The Proposed Actions would not alter any street patterns, street hierarchies, streetscape arrangements, or block forms in the secondary study area. The configuration of the street grid within the secondary study area would continue to include narrow roads and regular block sizes, and would continue to carry local traffic with parking lanes on both sides of the street. All of the streets in the secondary study area would continue to be flanked by concrete sidewalks with street lights and street trees. As described above, the Proposed Project would introduce new street trees along portions of the sidewalk adjacent to the Development Site in order to meet the requirements of ZR § 26-41, which would create a condition similar to and consistent within the secondary study area.

Natural Features & Open Space

The Proposed Actions would not result in changes to the secondary study area's natural features or open space. The topography of the 400-foot study area would remain generally flat, with a gradual slope upward from the Bushwick Inlet waterfront to the inland blocks of the secondary study area. All open spaces within the secondary study area (i.e., McCarren Park, William Vale Hotel public plaza, and the 25 Kent Avenue POPS) would remain, and the Proposed Project would introduce additional public open space (i.e., the 9,690-sf PAA space) to the secondary study area that would be consistent with passive open space uses found elsewhere within the study area.

Visual Resources

Primary Study Area (Development Site)

In the future with the Proposed Actions, construction of the Proposed Project would not obstruct any view corridors or alter any visual resources in the primary study area, as the new development would occur on an existing block that contains no visual resources, and no new visual resources are anticipated to be introduced within the primary study area as a result of the Proposed Actions. Therefore, the Proposed Actions would not result in any significant adverse impacts on visual resources.

Secondary Study Area (400-Foot Radius)

No changes to visual resources are anticipated in the secondary study area as a result of the Proposed Actions. As noted above, partially obstructed views of the Manhattan skyline can be seen when facing west from the east-west streets and sidewalks in the study area. As, the Proposed Actions are site-specific, they would not alter building uses, bulks, or arrangements in the surrounding area nor would they result in any changes to streets, blocks, topography, open spaces, or natural features in the secondary study area under the With-Action scenario. Furthermore, as shown in **Figures F-7a** through **F-7e**, the Proposed Project would not obstruct eastern views of McCarren Park. Therefore, no changes to visual resources are anticipated in the secondary study area as a result of the Proposed Actions. Rather, new views of McCarren Park would be created from within the interior of the public plaza.

Assessment

The Proposed Actions would not result in significant adverse impacts to urban design or visual resources in the primary study area or the surrounding secondary study area. Although the Proposed Project would represent a change for the primary and secondary study areas, the Proposed Actions would not result in a significant adverse impact to urban design or visual resources. The Proposed Project would be constructed on an existing block and would not entail any changes to topography, street patterns, street

hierarchy, block shapes, or natural features in either the primary or secondary study areas. Additionally, the Proposed Actions would not create land uses nor structures that would be substantially incompatible with the existing and emerging character of the surrounding Greenpoint and Williamsburg neighborhoods. Rather, as the existing single-story, brick warehouse buildings would be replaced with a new, 10-story building containing a plaza and retail, office, light industrial, and restaurant uses, the Proposed Project would be compatible with and enhance the surrounding built environment.

As illustrated in **Figures F-7a** through **F-7e**, the secondary study area would undergo a noticeable alteration to the visual context in relation to the primary study area, with the Proposed Project representing a visible change to the perspective of a pedestrian adjacent to the primary study area. As shown in these figures, the Proposed Project would alter the visual setting of the primary study area by replacing a No-Action development scenario that differs to the secondary study area in bulk and height, with a development that is contextual to adjacent mid- and high-rise buildings present in the surrounding area. Compared to No-Action conditions, the height of the building(s) at the Development would increase from one-story (approximately 20-feet-tall) to 10-stories (approximately 135-feet-tall), and the built FAR at the Development Site would increase from 1.0 to 4.8. The Proposed Project would be consistent with newer development found within the secondary study area, whose built FAR generally ranges between 4.0 and 8.0, and buildings that range in height between seven- and 20-stories (with the tallest building being the nearby William Vale Hotel, reaching up to 250-feet in height). Furthermore, as the development facilitated by the Proposed Actions would be built in accordance with the proposed IBIA special permit and the bulk requirements allowed by the special permit, the Proposed Project would meet the site design, envelope, and urban design requirements specified in the existing IBIA special permit text. The zoning text amendment would not change any of the requirements or findings of the existing IBIA special permit, but would make the special permit available at the Development Site.

In addition, the Proposed Project would not obstruct any views in the primary or secondary study areas from adjacent publicly accessible locations and would not obstruct any view corridors of significant visual resources, but would provide new views from the primary study area to McCarren Park. Furthermore, as shown in **Figures F-8a** through **F-8c**, the Proposed Project would enhance the pedestrian experience adjacent to the primary study area through the improvement of streetscape and sidewalk conditions by eliminating curb cuts along Berry, North 12th, and North 13th Streets; by adding new street trees; and by providing approximately 9,690 sf of street level PAA space (of which, approximately 4,800-sf would be designed as public plaza space). Additionally, while some of the streetwall along the Development Site's Berry, North 12th, and North 13th street frontages would be broken up and reduced compared to No-Action conditions (due to the proposed PAA space), the Proposed Project's various ground floor retail spaces would be glazed with transparent materials, creating active street walls along the primary study area's three street frontages, which would further enhance the pedestrian experience adjacent to the primary study area. While the primary study area under With-Action condition would provide less retail frontage along the perimeter of the Development Site compared to No-Action conditions,[1] the proposed PAA space and retail frontages along both the perimeter of the Development Site and within the interior of the site would further increase pedestrian activity within and in the vicinity of the primary study area. Streetscape improvements and ground floor retail space along the public corridors, and the creation of new corridors due to the PAA space, would enhance the pedestrian realm by making the surrounding area more active and inviting, and would create a natural extension of open space uses found at the adjacent McCarren Park. While the With-Action development would be prominent within the study area, the

[1] The RWCDS assumes that absent the Proposed Actions, the six, currently unoccupied buildings on Lots 25, 33, 35, 38, 41, and 43 would be converted and reoccupied with commercial retail uses.

increased density at the Development Site would be appropriate considering the site's proximity located near public transit, including the Nassau Avenue (G) and Bedford Avenue (L) subway stations; the B32, B62, and B43 bus routes; the North Williamsburg landing for the NYC Ferry East River route; and several nearby Citi Bike stations. In the context of this specific area, the pedestrian is also exposed to other buildings of similar or greater height (e.g., The William Vale Hotel, 25 Kent Avenue) in the secondary study area. As such, the Proposed Actions would not result in significant adverse impacts to urban design and visual resources in the primary study area or the surrounding secondary study area, but is expected to complement and improve the urban design of the area.

ATTACHMENT G

WATER AND SEWER INFRASTRUCTURE

I. INTRODUCTION

This attachment assesses the potential effects of the Proposed Actions on the City's water supply, wastewater treatment, and stormwater management infrastructure in accordance with the 2021 *City Environmental Quality Review* (CEQR) *Technical Manual*. As discussed in **Attachment A, "Project Description,"** the Proposed Actions would facilitate the development of an approximately 283,433 gross square foot (gsf) commercial/manufacturing building (the "Proposed Project") in the Greenpoint neighborhood of Brooklyn.

II. METHODOLOGY

Water Supply

According to the *CEQR Technical Manual*, a preliminary water supply infrastructure analysis is needed if a project would result in an exceptionally large demand for water (e.g., more than one million gallons per day (mgd)) or is located in an area that experiences low water pressure (e.g., areas at the end of the water supply distribution system). The Development Site is located in the Greenpoint neighborhood of Brooklyn Community District (CD) 1 and is not located in an area that experiences low water pressure (i.e., it is not located at the end of the water supply distribution system, such as the Rockaway Peninsula or Coney Island). The Proposed Project would generate an incremental water demand of approximately 55,165 gallons per day (gpd) (including water related to sanitary and domestic uses) compared with the No-Action condition. While this would represent an increase in demand on the New York City water supply system, it does not meet the *CEQR Technical Manual* threshold requiring a detailed analysis (i.e., the Proposed Actions would not result in (i) water pressure of less than 30 lbs per square inch in the localized water main network; and (ii) water demand that would not be met by existing water supply infrastructure or require upgrades to the existing system). Therefore, an analysis of water supply is not warranted as it is expected that there would be adequate water service to meet the incremental water demand from the Proposed Project and there would be no significant adverse impacts on the City's water supply.

Wastewater and Stormwater Conveyance and Treatment

For wastewater and stormwater conveyance and treatment, a preliminary sewer analysis is warranted if a project site comprises more than five acres and would result in an increase of impervious surfaces on the site, or if a project is located in a combined sewer area and would result in the incremental development of at least 400 residential units or 150,000 sf or more of commercial space in the Bronx, Brooklyn, Staten Island, or Queens or at least 1,000 residential units or 250,000 sf or more of commercial space in Manhattan. As the Development Site is located in a combined sewer area in Brooklyn and the Proposed Project would exceed the *CEQR Technical Manual* commercial floor area threshold by approximately 34,561 gsf, a preliminary assessment of wastewater and stormwater infrastructure is provided.

Existing and future sanitary sewage generation was calculated for the Development Site based on land use generation rates set forth in Table 13-2 of the *CEQR Technical Manual*, as well as information from

the 2016 *Astoria Cove FEIS*. The New York City Department of Environmental Protection's (DEP's) Volume Calculation Matrix was then used to calculate the overall combined sanitary sewage and stormwater runoff volume discharged to the combined sewer systems for four rainfall volume scenarios with varying durations. Stormwater runoff volumes are determined by estimating the amount of pervious and impervious surfaces on the Development Site. The ability of the City's water and sewer infrastructure to handle the estimated demand/generation that is anticipated from the Proposed Project is assessed by estimating existing, No-Action, and With-Action water demand and sewage generation. Future With-Action water demand and wastewater generation is compared to the No-Action condition, and future With-Action combined stormwater runoff and wastewater generation volumes are compared to existing conditions.

III. EXISTING CONDITIONS

Wastewater Conveyance System

The majority of New York City's wastewater treatment system is comprised of the sewer network beneath the streets and the fourteen wastewater resource recovery facilities (WRRFs) located throughout the City. The majority of New York City's sewers are called combined sewers as they receive sanitary wastewater and stormwater runoff. Wastewater generated in a "drainage basin" (the area served by a WRRF) is conveyed through a network of combined sewers to the WRRF. The Development Site is served by combined sewers and is located within the drainage basin for the Newtown Creek WRRF, which is the largest wastewater treatment facility in the City, located approximately 0.8 miles to the northeast, at 320 Freeman Street in Greenpoint, Brooklyn.

Collection sewers can be one to two feet in diameter on side streets, and three or four feet in diameter under larger roadways, which connect to trunk sewers, generally five to seven feet in diameter. During dry weather, regulators built into the combined sewer system direct flows to interceptor sewers leading to the WRRFs. These large interceptor sewers (often up to ten or twelve feet in diameter) bring the wastewater to the WRRFs for treatment. At the Newtown Creek WRRF, the treatment plant serving the Development Site, wastewater is fully treated by physical and biological process before it is discharged primarily into the East River, but sometimes overflows during wet weather to Whale Creek Canal[1]. The quality of the treated wastewater (effluent) is regulated by a State Pollutant Discharge Elimination System (SPDES) permit issued by the New York State Department of Environmental Conservation (NYSDEC), which establishes limits for effluent parameters (i.e., suspended solids, fecal coliform bacteria, and other pollutants). As the volume of flow to a WRRF affects the level of treatment a plant can provide, the maximum permitted capacity for the Newtown Creek WRRF is 310 mgd. As presented in **Table G-1**, below, the average daily flows to the Newtown Creek WRRF for the 12-month period ending in December 2021 was approximately 198 mgd, which is well below the maximum permitted capacity of 310 mgd.

During and immediately after wet weather events, combined sewers can experience a much larger flow due to stormwater runoff collection. Stormwater runoff from impermeable surfaces is collected by catch basins along the street and conveyed by the City's combined sewer system to the Newtown Creek WRRF. During storm events, the regulators built into the system allow only twice the dry weather design flow into interceptor sewers, and any excess flow is directed to outfalls into the local waterway (e.g., the East

[1] *Newtown Creek Waterbody/Watershed Facility Plan Report*. June 2011, NYCDEP, Bureau of Wastewater Treatment. Page 1-5. <https://www1.nyc.gov/assets/dep/downloads/pdf/water/nyc-waterways/newtown-creek/newtown-creek-wwfp.pdf>

River, etc.) as combined sewer overflow (CSO). In the vicinity of the Development Site, there are several CSO outfalls discharging into the East River. The two most proximate CSO outfalls to the Development Site are located on the western terminus of North 12th Street and the western terminus of Quay Street. During storm events, excess flow from the combined sewers serving the Development Site would be directed to CSO outfalls via intercepting force mains.

TABLE G-1: Existing Newtown Creek WRRF Average Daily Sewer Flows

Year	Month	Average Daily Flows (mgd)
2021	January	187
	February	208
	March	185
	April	182
	May	192
	June	185
	July	220
	August	212
	September	212
	October	206
	November	182
	December	181
12-Month Average		***198***

Source: DEP "Monthly Operating Efficiency" tables 2021

Sanitary Flows

As described in **Attachment A, "Project Description,"** the 40,000-sf Development Site is currently occupied by eight single story warehouse/light industrial buildings; however, the only current occupant is the Applicant who occupies two of the buildings. As such, the existing sanitary flows presented in **Table G-2** represent the 25 percent occupancy (approximately 10,000 gsf). As presented in **Table G-2**, the existing uses are estimated to generate approximately 2,296 gpd of daily sanitary sewage, with a total water demand of approximately 3,996 gpd. Existing sanitary flows generated on the Development Site are conveyed to the Newtown Creek WRRF during dry weather events via the existing combined sewers serving the site.

TABLE G-2: Existing Water Consumption and Wastewater Generation on the Development Site[1]

Land Use	Rate[1]	GSF	Domestic Water/ Wastewater Generation (gpd)	A/C (gpd)
Industrial	Domestic: 10,000 gpd/acre; A/C: 0.17 gpd/sf	10,000	2,296	1,700
Office	Domestic: 0.10 gpd/sf; A/C: 0.17 gpd/sf	0	0	0
Retail	Domestic: 0.24 gpd/sf; A/C: 0.17 gpd/sf	0	0	0
Restaurant	Domestic: 0.24 gpd/sf; A/C: 0.17 gpd/sf	0	0	0
Total Water Consumption (Domestic Water + A/C)			***3,996 gpd***	
Total Wastewater Generation			***2,296 gpd***	

Note: [1]Based on *CEQR Technical Manual* water demand rates from Table 13-2 when available. Industrial/manufacturing domestic rate is based on the 2016 *Astoria Cove FEIS* and assume 10,000 gpd per acre. For industrial/manufacturing air conditioning (A/C), office rate applied. For restaurant, retail domestic and A/C rates applied.

Stormwater Flows

The Development Site has a total lot area of approximately 40,000 sf and is entirely occupied by single-story, flat-roofed buildings with full lot coverage. As such, impervious surfaces (roofs) comprise the entirety of the site resulting in an existing runoff coefficient of 1.00 (see **Table G-3**). For this analysis, standard DEP runoff coefficients were used to calculate the amount of stormwater runoff for various rainfall intensities and durations, with rainfall ranging from 0.00 inches to 2.50 inches over durations of 3.80 to 19.50 hours. **Table G-4** shows the combined stormwater runoff and wastewater generation for the Development Site under existing conditions. As indicated in the table, the Development Site currently generates between 0.00 and 0.06 million gallons (mg) of combined stormwater runoff and wastewater within the Newtown Creek WRRF for the different rainfall intensities.

TABLE G-3: Existing Surface Types on the Development Site

Surface Type	Roof[1]	Pavement and Walks	Other	Grass and Softscape	Total
Area (%)	100	0	0	0	100
Surface Area (sf)	40,000	0	0	0	40,000
Runoff Coefficient[2]	1.0	0.85	0.85	0.20	**1.0**

Notes:
[1] Total roof area on site.
[2] Runoff coefficients for each surface type are as per DEP.

TABLE G-4: Existing Combined Stormwater Runoff and Wastewater Generation

Rainfall (inches)	Duration (Hours)	Total Area (Acres)	Runoff Coefficient[1]	Stormwater Runoff to CSS (MG)[2]	Sanitary to CSS (MG)[3]	Total Volume to CSS (MG)
0.00	3.80	0.92	1.00	0.00	0.000	0.00
0.40	3.80			0.01	0.000	0.01
1.20	11.30			0.03	0.001	0.03
2.50	19.50			0.06	0.002	0.06

Notes:
[1] Refer to **Table G-3**.
[2] Conservatively assumes that all stormwater runoff from the Development Site would be conveyed to the combined sewer system, with no direct discharge.
[3] Derived from **Table G-2**.
MG = million gallons

IV. THE FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION CONDITION)

As noted above, the approximately 40,000-sf Development Site is currently developed with eight single-story warehouse/light industrial buildings, two of which are occupied by the Applicant's warehouse uses. In the future without the Proposed Actions, it is anticipated that the existing buildings on the Development Site would not be redeveloped; however, it is assumed that the Applicant would convert the remaining six buildings to as-of-right retail uses similar to those in the surrounding neighborhood and would more aggressively pursue additional occupants. As such, in the No-Action Condition the site would be fully tenanted – 25 percent by the Applicant's warehouse uses (approximately 10,000 gsf) and 75 percent by retail uses (approximately 30,000 gsf).

Sanitary Flows

As presented in **Table G-5**, the No-Action uses are estimated to generate approximately 9,496 gpd of daily sanitary sewage, with a total water demand of approximately 16,296 gpd. In the future without the

Proposed Actions, sanitary discharges would continue to be directed to the Newtown Creek WRRF during dry weather events via the existing combined sewers serving the site. As there is available capacity at the Newtown Creek WRRF for the incremental wastewater flows from the Development Site, the facility would continue to operate within its current design capacities in the 2025 No-Action condition.

TABLE G-5: No-Action Water Consumption and Wastewater Generation on the Development Site[1]

Land Use	Rate[1]	GSF	Domestic Water/ Wastewater Generation (gpd)	A/C (gpd)
Industrial	Domestic: 10,000 gpd/acre; A/C: 0.17 gpd/sf	10,000	2,296	1,700
Office	Domestic: 0.10 gpd/sf; A/C: 0.17 gpd/sf	0	0	0
Retail	Domestic: 0.24 gpd/sf; A/C: 0.17 gpd/sf	30,000	7,200	5,100
Restaurant	Domestic: 0.24 gpd/sf; A/C: 0.17 gpd/sf	0	0	0
Total Water Consumption (Domestic Water + A/C)			***16,296 gpd***	
Total Wastewater Generation			***9,496 gpd***	

Note: [1]Based on rates from **Table G-2** above.

Stormwater Flows

In the future without the Proposed Actions, stormwater runoff from the Development Site would continue to be collected and directed through the combined sewer system and then conveyed to the Newtown Creek WRRF for treatment. As noted above, it is assumed that the existing buildings on the Development Site would not be redeveloped in the No-Action condition, although the six currently unoccupied buildings would be converted to retail uses. As a result, the amount of stormwater runoff generated on the Development Site and runoff coefficient of 1.00 would also remain unchanged, but the sanitary flows would increase. As indicated in **Table G-6**, under the No-Action condition, the Development Site is estimated to generate between 0.00 and 0.07 mg of combined stormwater runoff and wastewater.

TABLE G-6: No-Action Combined Stormwater Runoff and Wastewater Generation

Rainfall (inches)	Duration (Hours)	Total Area (Acres)	Runoff Coefficient[1]	Stormwater Runoff to CSS (MG)[2]	Sanitary to CSS (MG)[3]	Total Volume to CSS (MG)
0.00	3.80	0.92	1.00	0.00	0.002	0.00
0.40	3.80			0.01	0.002	0.01
1.20	11.30			0.03	0.004	0.03
2.50	19.50			0.06	0.008	0.07

Notes:

[1] Refer to **Table G-3**.

[2] Conservatively assumes that all stormwater runoff from the Development Site would be conveyed to the combined sewer system, with no direct discharge.

[3] Derived from **Table G-5**.

MG = million gallons

In the future without the Proposed Actions, stormwater runoff from the Development Site would continue to be collected and directed through the combined sewer system and then conveyed to the Newtown Creek WRRF for treatment as in the existing conditions.

V. THE FUTURE WITH THE PROPOSED ACTIONS (WITH-ACTION CONDITION)

As described in **Attachment A, "Project Description,"** in the 2025 With-Action condition, the Development Site would be redeveloped with a 10-story building containing approximately 283,433 gsf of commercial/manufacturing uses, including approximately 184,561 gsf of commercial uses and 32,990 gsf of industrial uses (with an increment of approximately 154,561 gsf of commercial uses and 22,990 gsf of industrial uses compared to No-Action conditions). In addition, the Proposed Project is anticipated to include a 9,690-sf publicly accessible open space ("PAA space"), of which approximately 7,592 sf of those spaces would be open to the sky and feature several landscaped areas.

Sanitary Flows

As described previously, the Development Site is located in an area served by combined sewers. In the future with the Proposed Actions, wastewater from the Development Site would continue to be treated by the Newtown Creek WRRF, which has a SPDES-permitted dry weather flow capacity of 310 mgd. As shown in **Table G-7**, the Proposed Project would generate approximately 34,477 gpd of sanitary sewage, with a total water demand of approximately 71,460 gpd. This represents a net increase of approximately 24,981 gpd (0.025 mgd) of sanitary sewage generation and approximately 55,165 gpd (0.055 mgd) of total water consumption over the No-Action condition. While this represents an increase in sanitary flows, it is equivalent to less than 0.01 percent of the average daily flow at the Newtown Creek WRRF, and would not result in an exceedance of the plant's permitted capacity of 310 mgd.

TABLE G-7: With-Action Water Consumption and Wastewater Generation on the Development Site

Land Use	Rate[1]	GSF	Domestic Water/ Wastewater Generation (gpd)	A/C (gpd)
Industrial	Domestic: 10,000 gpd/acre; A/C: 0.17 gpd/sf	32,990	7,573	5,608
Office	Domestic: 0.10 gpd/sf; A/C: 0.17 gpd/sf	124,224	12,422	21,118
Retail	Domestic: 0.24 gpd/sf; A/C: 0.17 gpd/sf	47,171	11,321	8,019
Restaurant	Domestic: 0.24 gpd/sf; A/C: 0.17 gpd/sf	13,166	3,160	2,238
Water Consumption				
Total Water Consumption			***71,460***	
Incremental Water Consumption (Compared to No-Action)			***+55,165***	
Wastewater Generation				
Total Wastewater Generation			***34,477***	
Incremental Wastewater Generation (Compared to No-Action)			***+24,981***	

Note: [1]Based on rates from **Table G-2**.

Connecting to the City's sewer system requires certification from DEP as part of the building permit process, which is not a discretionary approval. The Applicant would be required to file a site connection proposal for approval from DEP to tie into the sewer system. In order to obtain a sewer connection permit from DEP, the Applicant would be required to demonstrate that the existing system could handle the increased flows due to the Proposed Project. As part of the site connection approval process, a hydraulic analysis of the existing sewer system would likely be required to determine whether the existing sewer system is capable of supporting higher density development and the related increase in wastewater flow, or whether there will be a need to upgrade the existing sewer system. In addition, there may be a need to amend the existing drainage plan based on the hydraulic analysis calculations. Any analysis and

improvements, if required, would be undertaken prior to construction of the Proposed Project and would be coordinated with DEP for review and approval. In addition, in accordance with the New York City Plumbing Code (Local Law 33 of 2007), while not accounted for in the quantitative analysis, the Proposed Project would be required to utilize low-flow plumbing fixtures, which would reduce sanitary flows to the plant. Therefore, the Proposed Project would not result in a significant adverse impact to the City's sanitary sewage conveyance and treatment.

Stormwater Flows

In the future with the Proposed Actions, the existing single-story buildings, which occupy the entirety of the Development Site, would be replaced with the Proposed Project. As discussed above, the Proposed Project is anticipated to include a 9,690-sf PAA space, of which approximately 7,592-sf would be open to the sky and 2,098 would be partially-covered. Of the approximately 7,592 sf of those areas that would be open to the sky, approximately 6,109 sf would be paved and 1,483 sf would be covered by grass/soft scape. **Table G-8** shows the surface types that are expected on the Development Site under 2025 With-Action conditions. As presented in **Table G-8**, the runoff coefficient for the Development Site would decrease from 1.00 to 0.95 in the future with the Proposed Actions.

TABLE G-8: With-Action Surface Types on the Development Site

Surface Type	Roof[1]	Pavement and Walks	Other	Grass and Softscape	Total
Area (%)	78	19	0	3	100
Surface Area (sf)	32,408	6,109	0	1,483	40,000
Runoff Coefficient[2]	1.0	0.85	0.85	0.20	0.95

Notes:
[1] Total roof area on site.
[2] Runoff coefficients for each surface type are as per DEP.

The DEP Flow Volume Calculation Matrix was used to compare the estimated project generated combined flows (stormwater runoff and sanitary flows) to the combined sewer system under the No-Action and With-Action, which are shown in **Table G-9** below. As shown in the table, depending on the rainfall volume and duration, the total With-Action volume to the combined sewer system (both stormwater and sanitary) could be between 0.01 and 0.09 mg. Compared to existing conditions, this would represent an increase in combined sewer flows between 0.01 and 0.02 mg over the No-Action condition.

TABLE G-9: No-Action and With-Action Combined Stormwater Runoff and Wastewater Generation

		No-Action Condition			With-Action Condition			
Rainfall (inches)	Duration (Hours)	Stormwater Runoff to CSS (MG)	Sanitary to CSS (MG)	Total to CSS (MG)	Stormwater Runoff to CSS (MG)	Sanitary to CSS (MG)	Total to CSS (MG)	Increased Total Volume to CSS (MG)
0.00	3.80	0.00	0.002	0.00	0.00	0.005	0.01	***0.01***
0.40	3.80	0.01	0.002	0.01	0.01	0.005	0.02	***0.01***
1.20	11.30	0.03	0.004	0.03	0.03	0.016	0.05	***0.02***
2.50	19.50	0.06	0.008	0.07	0.06	0.028	0.09	***0.02***

Notes:
MG = million gallons

As noted above, the Development Site is located in an area that is well-served by combined sewer infrastructure. Given the nominal increase in flows generated by the Proposed Project and the size of the combined sewer facilities in the vicinity of the Development Site, it is anticipated that there is ample capacity in the adjacent sewer infrastructure to accommodate the additional combined flows generated

by the Proposed Actions. As noted above, the Applicant would be required to file a site connection proposal for approval from DEP to tie into the City's sewer system. As part of the site connection approval process, a stormwater analysis would be required in order to ensure that the Proposed Project complies with the required stormwater release rate. Therefore, the Proposed Project would not result in a significant adverse impact to the City's combined sewer system.

Stormwater Best Management Practices

The Flow Volume Matrix calculations do not reflect the use of any sanitary and stormwater source control best management practices (BMPs) to reduce sanitary flow and stormwater runoff volumes to the combined sewer system. Stormwater BMPs would be required as part of the DEP site connection approval process in order to bring the Proposed Project into compliance with the required stormwater release rate. Based on the DEP Guidelines for Detention Facility Design, dated November 19, 2012, for new developments, the required stormwater release rate for the Proposed Project is required to be 0.25 cubic feet per second (cfs) or ten percent of the allowable flow per the drainage plan, whichever is greater. Specific BMP methods will be determined with further refinement of the building design and in consultation with DEP.

A broad range of BMPs could be implemented on the Development Site to facilitate stormwater source controls and limit the stormwater release rate to the required rate. The implementation of low-flow fixtures, as per the New York City Plumbing Code, Local Law 33 of 2007, and the U.S. Environmental Protection Agency's WaterSense Program, would help control sanitary flows. To further offset these increases, on-site stormwater control measures of BMPs could be implemented to retain or slowly release stormwater runoff with controlled discharge rates to the City's combined sewer system.

The following typical BMP measures could be used to help manage stormwater flows: the implementation of BMPs described in the New York City Green Infrastructure Plan and/or green technologies, such as blue and green roofs, subsurface detention and infiltration, porous pavement, enhanced tree pits, and rain cisterns, depending on site conditions. The design of detention tanks, green roofs, and/or other chosen stormwater control BMPs, would be required to meet the required release rate.

Therefore, with the incorporation of appropriate BMPs that would be required as part of the site connection approval process to be reviewed and approved by DEP, the overall volume of sanitary sewer discharge and stormwater runoff, as well as the peak stormwater runoff rate, would be reduced. Sewer conveyance near the Development Site and the treatment capacity at the Newtown Creek WRRF is sufficient to handle wastewater flow resulting from the Proposed Project. Therefore, there would be no significant adverse impacts on wastewater treatment or stormwater conveyance infrastructure as a result of the Proposed Actions.

ATTACHMENT H

TRASPORTATION

I. INTRODUCTION

This attachment presents the findings of the analyses of traffic, parking, transit, and pedestrian conditions for the Reasonable Worst Case Development Scenario (RWCDS). As discussed in **Attachment A, "Project Description,"** the applicant is seeking the approval of four discretionary actions in order to facilitate the construction of a new 10-story, 283,433-gross-square-foot (gsf), mixed commercial and light industrial building (the "Proposed Project") at the Applicant-owned Development Site (20 Berry Street). To facilitate the Proposed Project, the Applicant is requesting (i) a zoning map amendment to rezone the Development Site from an M1-1 to an M1-2 district; (ii) a zoning text amendment affecting ZR § 74-968 (Maps of Industrial Business Incentive Areas); (iii) a special permit to (a) increase the FAR from 2.0 to 4.8 to incentivize industrial uses, pursuant to ZR § 74-963, (b) to modify the underlying public plaza requirements pursuant to ZR § 74-964(b), and (c) modify accessory parking requirements and loading berth requirements pursuant to ZR § 74-764(c). The Proposed Development Site is bounded by Berry Street on the east, North 12th Street on the south, and North 13th Street on the north (refer to **Figure H-1**).

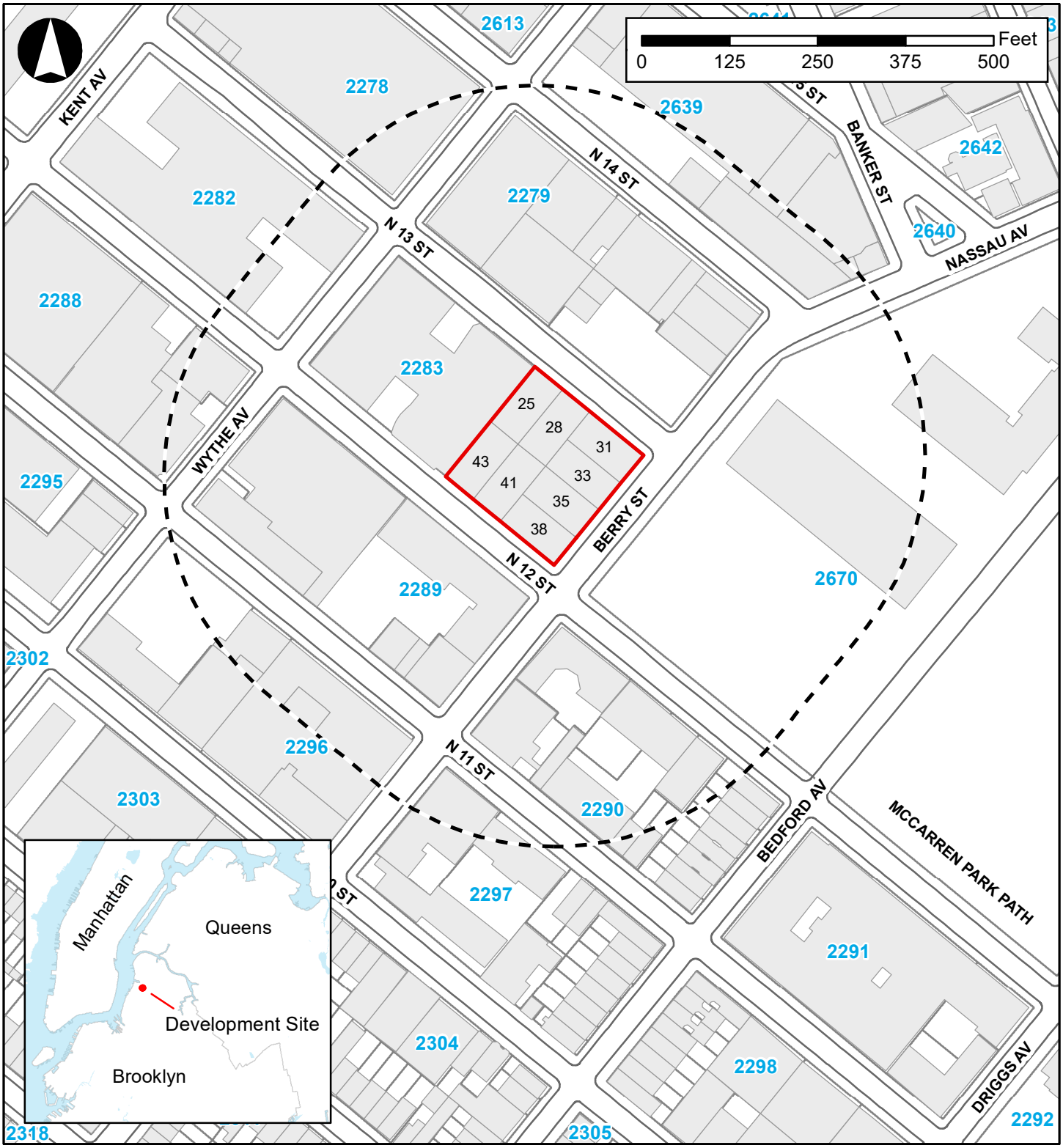
In the future with the Proposed Actions, the Applicant proposes to construct a new 10-story building containing approximately 47,171 gsf of local retail space; 124,224 gsf of commercial office space; 32,990 gsf of light industrial space; 13,166 gsf of restaurant space; and 80 accessory parking spaces in a below-grade garage. In the future without the Proposed Actions, it is assumed that the site would be fully tenanted with approximately 30,000 gsf of local retail uses and approximately 10,000 gsf of light industrial uses similar to those required under the proposed IBIA designation, although the light industrial uses would not be protected.

The Proposed Project is expected to be completed and fully operational by 2025. The incremental difference between the No-Action and With-Action scenarios serve as the basis of the transportation impact analysis, which was conducted in accordance with the 2021 City Environmental Quality Review (*CEQR) Technical Manual*.

II. PRELIMINARY ANALYSIS METHODOLOGY

The 2021 *City Environmental Quality Review* (CEQR) *Technical Manual* describes a two-level screening procedure for the preparation of a "preliminary analysis" to determine if quantified operational analyses of transportation conditions are warranted. As discussed below, the preliminary analysis begins with a trip generation (Level 1) analysis to estimate the number of person and vehicle trips attributable to the RWCDS. According to the *CEQR Technical Manual*, if the RWCDS development is expected to result in fewer than 50 peak hour vehicle trips and fewer than 200 peak hour transit or pedestrian trips, further quantified analyses are not warranted. When these thresholds are exceeded, detailed trip assignments (Level 2) are to be performed to estimate the incremental trips that could be incurred at specific transportation elements and to identify potential locations for further analyses. If the trip assignments show that the RWCDS would generate 50 or more peak hour vehicle trips at an intersection, 200 or more peak hour subway trips at a station, 50 or more peak hour bus trips in one direction along a bus route, or 200 or more peak hour pedestrian trips traversing a sidewalk, corner area, or crosswalk, then further quantified operational analyses may be warranted to assess the potential for significant adverse impacts on traffic, transit, pedestrians, parking, and vehicular and pedestrian safety.

Figure H-1
Project Location



Legend

Development Site | 400-Feet Radius | Existing Building | 2283 Block | 28 Lot

III. LEVEL 1 SCREENING ASSESSMENT

A Level 1 trip generation screening assessment was conducted in order to estimate the number of person and vehicle trips by mode expected to be generated by the Proposed Actions during the weekday AM, midday, PM, and Saturday midday peak hours. These estimates were then compared to the *CEQR Technical Manual* analysis thresholds of 50 peak hour vehicle trips, 200 peak hour subway/rail riders, 50 peak hour bus riders, and 200 peak hour pedestrian trips to determine if a Level 2 screening and/or quantified operational analyses may be warranted. The travel demand assumptions used for this assessment are discussed below and a detailed travel demand forecast is provided.

Tables H-1, below, provides a comparison of the 2025 No-Action and 2025 With-Action conditions identified for analysis purposes under the Proposed Project. As shown in **Table H-1**, by 2025, the incremental (net) change that would result under the Proposed Project is a net increase of approximately 17,171 gsf of local retail space, 124,224 gsf of commercial office space, 22,990 gsf of light industrial space, 13,166 gsf of restaurant uses, and 80 parking spaces. As the incremental development would have the potential to exceed *CEQR Technical Manual* analysis thresholds, preliminary travel demand forecasts were prepared.

Table H-1: Comparison of 2025 No-Action and 2025 With-Action Conditions (Proposed Project)

Land Use	No-Action	With-Action	Increment
Local Retail	30,000 gsf	47,171 gsf	+17,171 gsf
Commercial Office	0 gsf	124,224 gsf	+124,224 gsf
Light Industrial	10,000 gsf	32,990 gsf	+22,990 gsf
Restaurant	0 gsf	13,166 gsf	+13,166 gsf
Accessory Parking Spaces	0 spaces	80 spaces	+80 spaces

Transportation Planning Factors

Table H-2 shows the transportation planning factors that were used to forecast the travel demand generated by the proposed uses in the weekday AM, midday, PM and Saturday midday peak hours. These include trip generation rates, temporal and directional distributions, mode choice factors, vehicle occupancies, and truck trip factors for the incremental differences between the No-Action and With-Action scenarios (refer to **Table H-1**). The factors in **Table H-2** were based on data cited 2021 *City Environmental Quality Review (CEQR) Technical Manual;* 2012-2016 American Association of State Highway Transportation Officials (AASHTO) Census Transportation Planning Products (CTPP) reverse journey-to-work data for census tracts in proximity to the Development Site (Brooklyn tracts 517, 553, 555, 557, 561, and 569); data from a 2019 PHA mode choice survey for an office use in Williamsburg, Brooklyn; data provided by the New York City Department of Transportation (NYCDOT); and factors developed for recent environmental reviews. Factors are shown for the weekday AM and PM peak hours (typical peak periods for commuter travel demand) and the weekday midday and Saturday peak hours (typical peak periods for retail demand).

Travel Demand Forecast

The net incremental change in person and vehicle trips expected to result from the Proposed Actions were derived based on the net change in land uses and the transportation planning factors shown in **Table H-2**. **Tables H-3a and H-3b** show an estimate of peak hour person trips and vehicle trips that would be

generated under the No-Action condition, With-Action condition, and the net incremental change between No-Action and With-Action conditions.

Table H-2: Transportation Planning Factors

Land Use:	**Local Retail**		**Office**		**Light Industrial**		**Restaurant**	
Trip Generation:	(1)		(1)		(4)		(6)	
Weekday	329.0		18.0		14.7		173.0	
Saturday	358.0		3.9		2.2		139.0	
	per 1,000 gsf		per 1,000 gsf		per 1,000 gsf		per 1,000 gsf	
Temporal Distribution:	(1)		(1)		(4)		(6)	
AM	4.8%		12.4%		13.2%		1.0%	
MD	8.0%		11.0%		11.0%		13.7%	
PM	10.9%		10.5%		14.2%		7.7%	
SAT	11.7%		14.1%		10.7%		11.6%	
	(1)		(3)	(4)	(5)	(4)	(6)	
Modal Splits:	All Periods		AM/PM/SAT	MD	AM/PM/SAT	MD	All Periods	
Auto	11.0%		12.1%	2.0%	38.1%	2.0%	20.0%	
Taxi	0.0%		5.9%	3.0%	0.6%	3.0%	10.0%	
Subway/Railroad	3.0%		45.7%	6.0%	35.9%	6.0%	15.0%	
Bus	2.0%		6.2%	6.0%	5.0%	6.0%	15.0%	
Ferry	0.0%		2.7%	0.0%	0.0%	0.0%	0.0%	
Walk/Bike/Other	84.0%		27.4%	83.0%	20.4%	83.0%	40.0%	
	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	
	(1)		(1)		(4)		(6)	
In/Out Splits:	In	Out	In	Out	In	Out	In	Out
AM	53.0%	47.0%	89.0%	11.0%	88%	12%	94%	6%
MD	50.0%	50.0%	48.0%	52.0%	50%	50%	65%	35%
PM	50.0%	50.0%	17.0%	83.0%	12%	88%	65%	35%
SAT	50.0%	50.0%	50.0%	50.0%	47%	53%	63%	37%
Vehicle Occupancy:	(2)		(3)		(5)(4)		(6)	
	All Periods		All Periods		All Periods		All Periods	
Auto	1.20		1.15		1.12		2.20	
Taxi	1.20		1.85		1.20		2.30	
Truck Trip Generation:	(1)		(1)		(4)		(6)	
Weekday	0.35		0.32		0.67		3.60	
Saturday	0.04		0.01		0.67		3.60	
	per 1,000 sf		per 1,000 sf		per 1,000 sf		per 1,000 sf	
	(1)		(1)		(4)		(6)	
AM	8.0%		10.0%		14.0%		6.0%	
MD	11.0%		11.0%		9.0%		6.0%	
PM	2.0%		2.0%		1.0%		1.0%	
SAT	11.0%		11.0%		0.0%		0.0%	
	In	Out	In	Out	In	Out	In	Out
	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%

Notes :

(1) Based on *City Environmental Quality Review (CEQR) Technical Manual* (2021)

(2) Based on data provided by NYCDOT

(3) Based on 2019 PHA mode choice survey data for office use in Williamsburg, Brooklyn

(4) Based on *East New York Rezoning Proposal FEIS* (2016)

(5) Based on 2012-2016 AASHTO CTPP Reverse Journey-to-Work data for Brooklyn Census Tracts 517, 553, 555, 557, 561 and 569

(6) Based on data from the *12 Franklin Street EAS,* 2018

Table H-3a: Travel Demand Forecast

No-Action Condition											
Land Use:		**Local Retail**		**Office**		**Light Industrial**		**Restaurant**		**Total**	
Size/Units:		30,000 gsf		0 gsf		10,000 gsf		0 gsf			
Peak Hour Person Trips:											
	AM	474		0		20		0		494	
	MD	790		0		18		0		808	
	PM	1,076		0		22		0		1,098	
	SAT	1,258		0		4		0		1,262	
Person Trips:											
		In	Out	In	Out	In	Out	In	Out	In	Out
AM	**Auto**	28	25	0	0	7	1	0	0	35	26
	Taxi	0	0	0	0	0	0	0	0	0	0
	Subway	8	7	0	0	6	1	0	0	14	8
	Bus	5	4	0	0	1	0	0	0	6	4
	Ferry	0	0	0	0	0	0	0	0	0	0
	Walk/Other	210	187	0	0	4	0	0	0	214	187
	Total	251	223	0	0	18	2	0	0	269	225
		In	Out	In	Out	In	Out	In	Out	In	Out
MD	**Auto**	43	43	0	0	0	0	0	0	43	43
	Taxi	0	0	0	0	0	0	0	0	0	0
	Subway	12	12	0	0	1	1	0	0	13	13
	Bus	8	8	0	0	1	1	0	0	9	9
	Ferry	0	0	0	0	0	0	0	0	0	0
	Walk/Other	332	332	0	0	7	7	0	0	339	339
	Total	395	395	0	0	9	9	0	0	404	404
		In	Out	In	Out	In	Out	In	Out	In	Out
PM	**Auto**	59	59	0	0	1	7	0	0	60	66
	Taxi	0	0	0	0	0	0	0	0	0	0
	Subway	16	16	0	0	1	7	0	0	17	23
	Bus	11	11	0	0	0	1	0	0	11	12
	Ferry	0	0	0	0	0	0	0	0	0	0
	Walk/Other	452	452	0	0	1	4	0	0	453	456
	Total	538	538	0	0	3	19	0	0	541	557
		In	Out	In	Out	In	Out	In	Out	In	Out
SAT	**Auto**	69	69	0	0	1	1	0	0	70	70
	Taxi	0	0	0	0	0	0	0	0	0	0
	Subway	19	19	0	0	1	1	0	0	20	20
	Bus	13	13	0	0	0	0	0	0	13	13
	Ferry	0	0	0	0	0	0	0	0	0	0
	Walk/Other	528	528	0	0	0	0	0	0	528	528
	Total	629	629	0	0	2	2	0	0	631	631
Vehicle Trips :											
		In	Out	In	Out	In	Out	In	Out	In	Out
AM	**Auto (Total)**	23	21	0	0	6	1	0	0	29	22
	Taxi	0	0	0	0	0	0	0	0	0	0
	Taxi Balanced	0	0	0	0	0	0	0	0	0	0
	Truck	0	0	0	0	0	0	0	0	0	0
	Total	23	21	0	0	6	1	0	0	29	22
		In	Out	In	Out	In	Out	In	Out	In	Out
MD	**Auto (Total)**	36	36	0	0	0	0	0	0	36	36
	Taxi	0	0	0	0	0	0	0	0	0	0
	Taxi Balanced	0	0	0	0	0	0	0	0	0	0
	Truck	1	1	0	0	0	0	0	0	1	1
	Total	37	37	0	0	0	0	0	0	37	37
		In	Out	In	Out	In	Out	In	Out	In	Out
PM	**Auto (Total)**	49	49	0	0	1	6	0	0	50	55
	Taxi	0	0	0	0	0	0	0	0	0	0
	Taxi Balanced	0	0	0	0	0	0	0	0	0	0
	Truck	0	0	0	0	0	0	0	0	0	0
	Total	49	49	0	0	1	6	0	0	50	55
		In	Out	In	Out	In	Out	In	Out	In	Out
SAT	**Auto (Total)**	58	58	0	0	1	1	0	0	59	59
	Taxi	0	0	0	0	0	0	0	0	0	0
	Taxi Balanced	0	0	0	0	0	0	0	0	0	0
	Truck	0	0	0	0	0	0	0	0	0	0
	Total	58	58	0	0	1	1	0	0	59	59

Table H-3b: Travel Demand Forecast (cont.)

		With-Action Condition										Net Increment		
Land Use:		Local Retail		Office		Light Industrial		Restaurant		Total		(With Action - No-Action)		
Size/Units:		47,171 gsf		124,224 gsf		32,990 gsf		13,166 gsf				Total		
Peak Hour Person Trips:														
	AM	560		278		66		24		928		434		
	MD	932		246		54		314		1,546		738		
	PM	1,270		236		70		176		1,752		654		
	SAT	1,878		70		8		214		2,170		908		
Person Trips:														
		In	Out	In	Out	In	Out	In	Out	In	Out	*In*	*Out*	*Total*
AM	**Auto**	33	29	30	4	22	3	5	0	90	36	*55*	*10*	*65*
	Taxi	0	0	15	2	0	0	2	0	17	2	*17*	*2*	*19*
	Subway	9	8	112	14	21	3	3	0	145	25	*131*	*17*	*148*
	Bus	6	5	15	2	3	0	3	0	27	7	*21*	*3*	*24*
	Ferry	0	0	7	1	0	0	0	0	7	1	*7*	*1*	*8*
	Walk/Other	249	221	68	8	12	2	10	1	339	232	*125*	*45*	*170*
	Total	297	263	247	31	58	8	23	1	625	303	*356*	*78*	*434*
		In	Out	In	Out	In	Out	In	Out	In	Out	*In*	*Out*	*Total*
MD	**Auto**	51	51	2	3	1	1	41	22	95	77	*52*	*34*	*86*
	Taxi	0	0	4	4	1	1	20	11	25	16	*25*	*16*	*41*
	Subway	14	14	7	8	2	2	31	16	54	40	*41*	*27*	*68*
	Bus	9	9	7	8	2	2	31	16	49	35	*40*	*26*	*66*
	Ferry	0	0	0	0	0	0	0	0	0	0	*0*	*0*	*0*
	Walk/Other	392	392	98	105	21	21	82	44	593	562	*254*	*223*	*477*
	Total	466	466	118	128	27	27	205	109	816	730	*412*	*326*	*738*
		In	Out	In	Out	In	Out	In	Out	In	Out	*In*	*Out*	*Total*
PM	**Auto**	70	70	5	24	3	23	23	12	101	129	*41*	*63*	*104*
	Taxi	0	0	2	12	0	0	11	6	13	18	*13*	*18*	*31*
	Subway	19	19	18	90	3	23	17	9	57	141	*40*	*118*	*158*
	Bus	13	13	2	12	0	3	17	9	32	37	*21*	*25*	*46*
	Ferry	0	0	1	5	0	0	0	0	1	5	*1*	*5*	*6*
	Walk/Other	533	533	11	54	2	13	47	25	593	625	*140*	*169*	*309*
	Total	635	635	39	197	8	62	115	61	797	955	*256*	*398*	*654*
		In	Out	In	Out	In	Out	In	Out	In	Out	*In*	*Out*	*Total*
SAT	**Auto**	103	103	4	4	1	2	27	16	135	125	*65*	*55*	*120*
	Taxi	0	0	2	2	0	0	13	8	15	10	*15*	*10*	*25*
	Subway	28	28	16	16	1	2	20	12	65	58	*45*	*38*	*83*
	Bus	19	19	2	2	0	0	20	12	41	33	*28*	*20*	*48*
	Ferry	0	0	1	1	0	0	0	0	1	1	*1*	*1*	*2*
	Walk/Other	789	789	10	10	1	1	54	32	854	832	*326*	*304*	*630*
	Total	939	939	35	35	3	5	134	80	1,111	1,059	*480*	*428*	*908*
Vehicle Trips :														
		In	Out	In	Out	In	Out	In	Out	In	Out	*In*	*Out*	*Total*
AM	**Auto (Total)**	28	24	26	3	20	3	2	0	76	30	*47*	*8*	*55*
	Taxi	0	0	8	1	0	0	1	0	9	1	*9*	*1*	*10*
	Taxi Balanced	0	0	9	9	0	0	1	1	10	10	*10*	*10*	*20*
	Truck	1	1	2	2	2	2	1	1	6	6	*6*	*6*	*12*
	Total	29	25	37	14	22	5	4	2	92	46	*63*	*24*	*87*
		In	Out	In	Out	In	Out	In	Out	In	Out	*In*	*Out*	*Total*
MD	**Auto (Total)**	43	43	2	3	1	1	19	10	65	57	*29*	*21*	*50*
	Taxi	0	0	2	2	1	1	9	5	12	8	*12*	*8*	*20*
	Taxi Balanced	0	0	4	4	2	2	14	14	20	20	*20*	*20*	*40*
	Truck	1	1	2	2	1	1	1	1	5	5	*4*	*4*	*8*
	Total	44	44	8	9	4	4	34	25	90	82	*53*	*45*	*98*
		In	Out	In	Out	In	Out	In	Out	In	Out	*In*	*Out*	*Total*
PM	**Auto (Total)**	58	58	4	21	3	21	10	5	75	105	*25*	*50*	*75*
	Taxi	0	0	1	6	0	0	5	3	6	9	*6*	*9*	*15*
	Taxi Balanced	0	0	7	7	0	0	8	8	15	15	*15*	*15*	*30*
	Truck	0	0	0	0	0	0	0	0	0	0	*0*	*0*	*0*
	Total	58	58	11	28	3	21	18	13	90	120	*40*	*65*	*105*
		In	Out	In	Out	In	Out	In	Out	In	Out	*In*	*Out*	*Total*
SAT	**Auto (Total)**	86	86	3	3	1	2	12	7	102	98	*43*	*39*	*82*
	Taxi	0	0	1	1	0	0	6	3	7	4	*7*	*4*	*11*
	Taxi Balanced	0	0	2	2	0	0	9	9	11	11	*11*	*11*	*22*
	Truck	0	0	0	0	0	0	0	0	0	0	*0*	*0*	*0*
	Total	86	86	5	5	1	2	21	16	113	109	*54*	*50*	*104*

Notes: 25% linked-trip factor applied to local retail trips during the weekday peak hours
5% linked-trip factor applied to local retail trips during the Saturday peak hour

Table H-4: Travel Demand Forecast Summary

Peak Hour	Net Vehicle[1]			Person Trips																	
				Subway			Bus			Ferry			Walk/Other			Off-Site Auto Trips[3]			Total Pedestrian Trips[2]		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
AM	63	24	87	131	17	148	21	3	24	7	1	8	125	45	170	10	4	14	294	70	364
MD	53	45	98	41	27	68	40	26	66	0	0	0	254	223	477	49	30	79	384	306	690
PM	40	65	105	40	118	158	21	25	46	1	5	6	140	169	309	34	23	57	236	340	576
SAT	54	50	104	45	38	83	28	20	48	1	1	2	326	304	630	61	50	111	461	413	874

Notes: [1]Includes auto, taxi, and truck trips for all peak hours

[2]Assumes local retail and restaurant uses park at off-site facilities in the vicinity of the Development Site

[3]Includes walk-only trips, as well as pedestrians en route to/from nearby subway stations, bus stops, ferry landings and off-site public parking facilities

As shown in **Table H-3a**, the No-Action project would generate approximately 494, 808, 1,098, and 1,262 person trips (in and out combined) in the weekday AM, midday, and PM, and Saturday peak hours, respectively. As shown in **Table H-3b**, the With-Action project would generate approximately 928, 1,546, 1,752, and 2,170 person trips (in and out combined) in the weekday AM, midday, and PM, and Saturday peak hours, respectively. Additionally, as shown in **Table H-3b**, the Proposed Action would generate an incremental increase of approximately 434, 738, 654, and 908 person trips (in and out combined) in the weekday AM, midday, and PM, and Saturday peak hours, respectively. **Table H-4** summarizes the incremental peak hour person trips and vehicle trips generated by the Proposed Project.

As shown in **Table H-4**, the Proposed Project would generate 87, 98, 105, and 104 incremental vehicle trips (auto, taxi, and truck combined) during the weekday AM, midday, PM, and Saturday midday peak hours, respectively. The Proposed Project would also generate an incremental increase of 148, 68, 158, and 83 subway trips in the weekday AM, midday, PM and Saturday midday peak hours, respectively. The Proposed Project would also generate an incremental increase of 24, 66, 46, and 48 bus trips during the weekday AM, midday, PM and Saturday midday peak hours, respectively. Additionally, the Proposed Project would generate an incremental increase of 8, 0, 6, and 2 ferry trips during the weekday AM, midday, PM and Saturday midday peak hours, respectively. In addition, the Proposed Project would generate a total of 364, 690, 576, and 874 pedestrian trips (including walk-only, subway, bus, and ferry trips, and trips to/from off-site parking facilities[1]) in the weekday AM, midday, PM, and Saturday midday peak hours, respectively. Of these incremental pedestrian trips, 170, 477, 309 and 630 are walk-only trips during the weekday AM, midday, PM and Saturday midday peak hours, respectively.

As the number of peak hour vehicle and pedestrian trips resulting from the Proposed Project would exceed the *CEQR Technical Manual* analysis thresholds for traffic and pedestrians (including walk-only, subway, and bus trips) during one or more peak hours, a Level 2 assessment was undertaken to identify specific transportation elements where additional detailed analysis may be warranted. As the number of incremental peak hour subway, bus, and ferry trips would not exceed the *CEQR Technical Manual* analysis threshold, additional detailed analysis is not required.

IV. LEVEL 2 SCREENING ASSESSMENT

A Level 2 screening assessment involves the assignment of project-generated trips to the study area's pedestrian elements, and street network, and the identification of specific locations where the incremental increase in demand may potentially exceed *CEQR Technical Manual* analysis thresholds and,

[1] The on-site accessory parking (80 spaces) would be utilized by tenants of the office and light industrial uses. As such, pedestrian trips to/from off-site parking facilities for the proposed local retail and restaurant uses have been include in the total pedestrian volumes.

therefore, require a quantitative analysis. As the incremental traffic, transit (subway), and pedestrian trips generated by the Proposed Actions exceed the *CEQR Technical Manual* thresholds, Level 2 screenings were conducted and are discussed below.

Transportation Network

Traffic

As shown in **Table H-4** and discussed above, the Proposed Actions' RWCDS are expected to result in incremental increases of approximately 87, 98, 105, and 104 vehicle trips in the weekday AM, midday, PM, and Saturday peak hours, respectively. As these traffic volumes exceed 50 trips in each peak hour (the *CEQR Technical Manual* Level 1 screening threshold for a detailed analysis), a preliminary assignment of these incremental traffic volumes was prepared for each period to help identify individual intersections for analysis (a Level 2 screening assessment).

The assignments of auto and taxi trips to the street network in proximity to the Development Site are based on the anticipated origins and destinations of vehicle trips associated with the different land uses projected under the RWCDS (i.e. office, local retail, light industrial, and restaurant uses). Origins/destinations for office and light industrial use trips were based on 2012-2016 ACS reverse journey-to-work data utilizing AASHTO CTPP while origins/destinations for local retail and restaurant uses, which generate mostly local trips, were based on population density within an approximately quarter-mile radius of the Development Site.

Auto and taxi trips were first assigned to various portals on the periphery of Greenpoint/Williamsburg, and there via the most direct route to the Development Site. As the on-site accessory parking would be utilized by the office and light industrial uses, these vehicles were conservatively assigned to the development's parking garage entrance on North 13th Street. Vehicle trips for the local retail and restaurant uses were conservatively assigned to nearby public parking garages with availability. Taxis were generally assigned to the building frontages on Berry, North 12th, or North 13th Streets depending on direction of origin. Trucks were assigned to NYCDOT-designated truck routes—Kent Avenue/Franklin Street and North 11th Street/North 12th Street (both Local Truck Routes), and the Brooklyn-Queens Expressway (a Through Truck Route)—and then to the most direct paths to and from the Proposed Project's loading docks on North 13th Street.

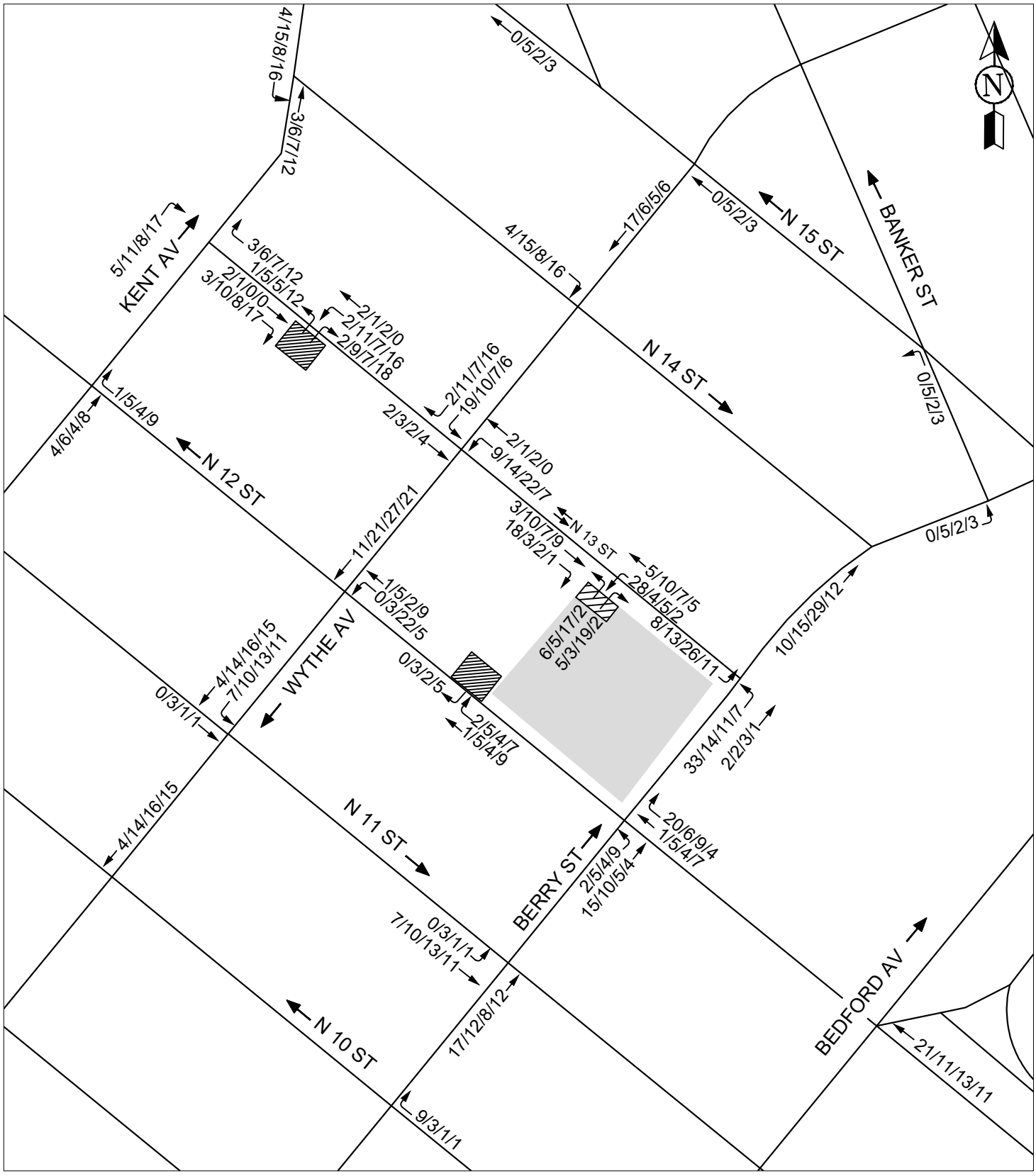
The assignment of net incremental peak hour vehicle trips at intersections in proximity to the Proposed Development Site are shown in **Figure H-2**. As shown in **Figure H-2**, no intersection is expected to experience an increase of 50 or more vehicles during any of the peak hours. Therefore, no significant impacts are expected, and a detailed traffic analysis is not warranted.

Pedestrians

Many project-generated trips would include a walk component using local sidewalks, street corners, and crosswalks, to access the project site. As shown above in **Table H-4**, the Proposed Actions' RWCDS would generate a net total of 364, 690, 576, and 874 pedestrian trips (including walk-only trips, subway, bus, and ferry trips, and off-site auto trips) during the weekday AM, midday, PM and Saturday peak hours, respectively. As the number of project generated pedestrian trips would exceed the 200-trip *CEQR Technical Manual* threshold during each of the analyzed peak hours, a Level 2 screening is required.

The project-generated pedestrian trips (walk-only, subway and bus trips) were assigned to pedestrian elements (sidewalks, corner area, and crosswalks) in the vicinity of the Development Site, during the

Incremental Traffic Volumes



LEGEND

- Development Site
- On-Site Parking Entry
- 2/2/2/2 - Weekday AM/MD/PM/SAT Traffic Volumes
- Off-Site Parking Entry for Office and Industrial Uses

weekday AM, midday, PM, and Saturday peak hours. In the weekday AM and PM peak hours, new pedestrian trips would be most concentrated on sidewalks and crosswalks adjacent to building entrances as well as along corridors connecting the Development Site to the Bedford Avenue (L) and Nassau Avenue (G) subway stations. In the midday and Saturday peak hours, pedestrian trips would tend to be more dispersed, as people travel throughout the area for lunch, shopping and/or errands. Based on a preliminary assignment, the Proposed Project would generate an increase of 200 or more pedestrian trips in one or more peak hours at three pedestrian elements (two sidewalks and one corner area), which have therefore been selected for analysis. These three pedestrian elements are listed below and are presented in **Figure H-3**.

Pedestrian Analysis Locations

Sidewalk

1. Berry Street between North 12th and North 13th Streets *(west sidewalk)*
2. North 13th Street between Wythe Avenue and Berry Street *(south sidewalk)*

Corner Area

1. Wythe Avenue and North 12th Street *(northeast corner)*

Parking

Parking demand from the proposed uses typically peak in the weekday midday period and decline during the afternoon and evening. As the proposed 80 spaces of on-site accessory parking are not expected to be sufficient to accommodate all of the projected demand under the Proposed Actions' RWCDS, a detailed analysis of parking conditions within ¼-mile of the Development Site during the weekday midday peak hour is included in this EAS. Existing on-street and off-street parking inventories are provided to document the existing supply and demand during the weekday midday period (when the combined parking demand from the proposed local retail, office, restaurant, and light industrial uses is expected to be the greatest). Changes in the parking supply and utilization under both No-Action and With-Action conditions are also forecasted.

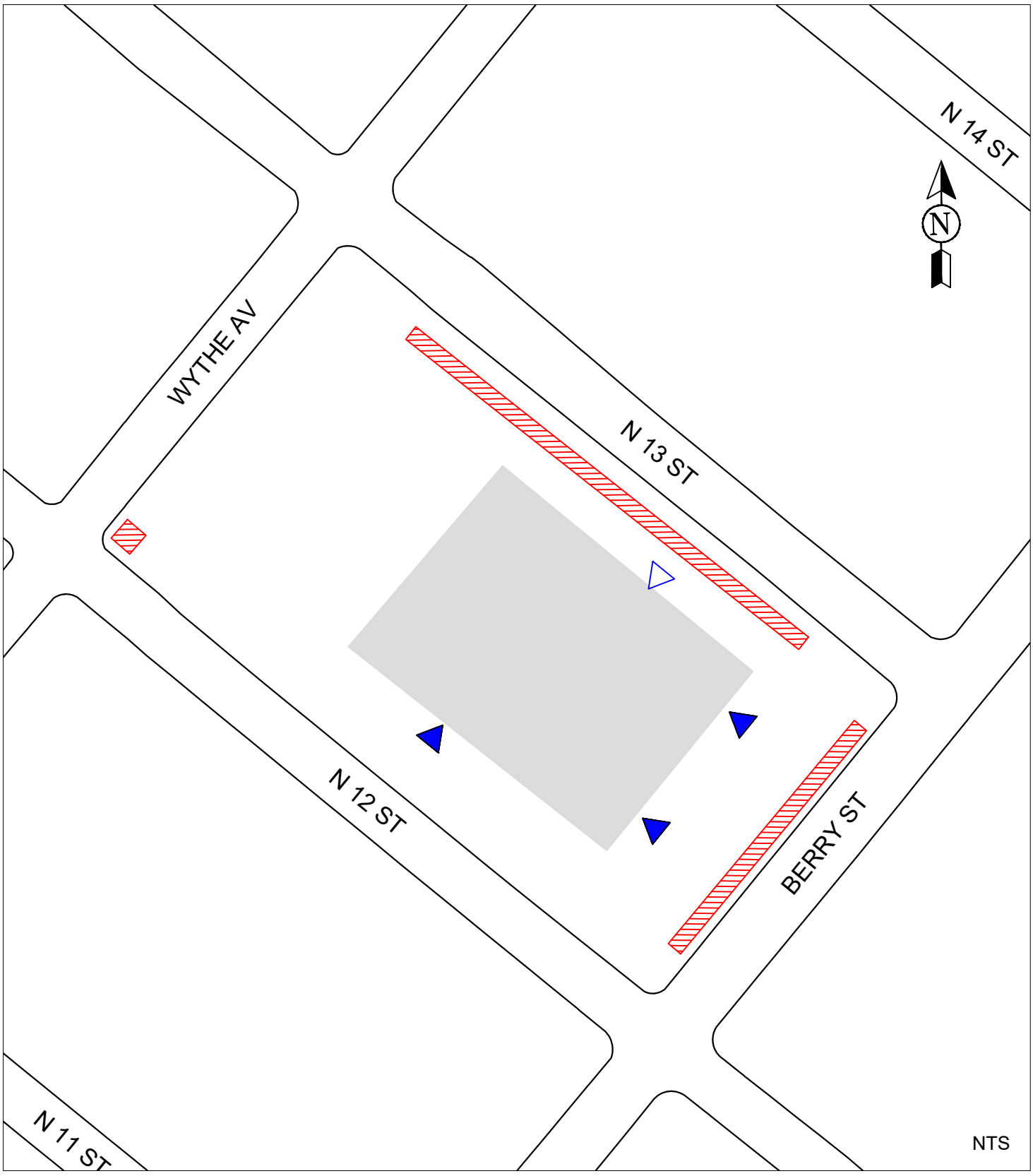
V. TRANSPORTATION ANALYSES METHODOLOGIES

Pedestrians

Analysis Methodology

Data on peak period pedestrian flow volumes was collected along the analyzed sidewalk and corner areas in the vicinity of the Development Site in June 2021. Peak hours were determined by comparing rolling hourly averages, and the highest 15-minute volumes within the selected peak hours were used for analysis. Based on existing peak pedestrian volumes within the study area, the 8:30 AM – 9:30 AM, 12:15

Analyzed Pedestrian Elements



LEGEND

- Development Site
- Pedestrian Element Analysis Location
- Commercial Office/ Light Industrial/Restaurant Entrance
- Retail Entrance

PM – 1:15 PM, 5:30 PM – 6:30 PM, and 2:00 PM – 3:00 PM periods were selected for analysis during the weekday AM, midday, PM, and Saturday peak hours, respectively. [2]

Peak 15-minute pedestrian flow conditions during the weekday midday period are analyzed using the *Highway Capacity Manual 2010* methodology and procedures outlined in the *CEQR Technical Manual*. Using this methodology, the congestion level of pedestrian facilities is determined by considering pedestrian volume, measuring the sidewalk or crosswalk width, determining the available pedestrian capacity and developing a ratio of volume flows to capacity conditions. The resulting ratio is then compared with LOS standards for pedestrian flow, which define a qualitative relationship at a certain pedestrian traffic concentration level. The evaluation of street crosswalks and corners is more complicated as these spaces cannot be treated as corridors due to the time incurred waiting for traffic lights. To effectively evaluate these facilities a "time-space" analysis methodology is employed which takes into consideration the traffic light cycle at intersections.

LOS standards are based on the average area available per pedestrian during the analysis period, typically expressed as a 15-minute peak period. LOS grades from A to F are assigned, with LOS A representative of free flow conditions without pedestrian conflicts and LOS F depicting significant capacity limitations and inconvenience. **Table H-5** defines the LOS criteria for pedestrian crosswalk/corner area and a sidewalk conditions, as based on the *Highway Capacity Manual* methodology.

The analysis of sidewalk conditions includes a "platoon" factor in the calculation of pedestrian flow to more accurately estimate the dynamics of walking. "Platooning" is tendency of pedestrians to move in bunched groups or "platoons" once they cross a street where cross traffic required them to wait. Platooning generally results in a level of service one level poorer than that determined for average flow rates.

Table H-5: Pedestrian Crosswalk/Corner Area and Sidewalk Levels of Service Descriptions

LOS	Crosswalk/Corner	Crosswalk/ Corner Area Criteria (ft^2/ped)	Platoon Sidewalk Criteria (ft^2/ped)
A	(Unrestricted)	> 60	> 530
B	(Slightly Restricted)	> 40 to 60	> 90 to 530
C	(Restricted but fluid)	> 24 to 40	> 40 to 90
D	(Restricted, necessary to continuously alter walking stride and direction)	> 15 to 24	> 23 to 40
E	(Severely restricted)	> 8 to 15	> 11 to 23
F	(Forward progress only by shuffling; no reverse movement possible)	$\leq$ 8	$\leq$ 11

Notes: Based on average conditions for 15 minutes
f t^2/ped – square feet of area per pedestrian
Source: *CEQR Technical Manual*

[2] To account for the ongoing effects of the Covid-19 Pandemic on study area pedestrian volumes, pre-pandemic secondary source data from the 2021 *Acme Fish Expansion FEIS* were utilized to develop adjustment factors for the 2021 count data.

Significant Impact Criteria

Sidewalks

The *CEQR Technical Manual* impact criteria for a non-central business district (non-CBD) location are used to identify significant adverse impacts due to the Proposed Actions. These criteria define a significant adverse sidewalk impact to have occurred under platoon conditions if the average pedestrian space under the No-Action condition is greater than 44.3 square feet/pedestrian (sf/ped), and the average pedestrian space under the With-Action condition is 40.0 sf/ped or less (LOS D or worse). If the average pedestrian space under the With-Action condition is greater than 40.0 sf/ped (LOS C or better), the impact should not be considered significant. If the No-Action pedestrian space is between 6.3 and 44.3 sf/ped, a reduction in pedestrian space under the With-Action condition should be considered significant based on **Table H-6**, which shows a sliding-scale that identifies what decrease in pedestrian space is considered a significant impact for a given pedestrian space value in the No-Action condition. If the reduction in pedestrian space is less than the value **in Table H-6**, the impact is not considered significant. If the average pedestrian space under the No-Action condition is less than 6.3 sf/ped, then a reduction in pedestrian space greater than or equal to 0.3 sf/ped, under the With-Action condition, should be considered significant.

Corner Areas and Crosswalks

For non-CBD areas, *CEQR Technical Manual* criteria define a significant adverse corner area or crosswalk impact to have occurred if the average pedestrian space under the No-Action condition is greater than 26.6 sf/ped and, under the With-Action condition, the average pedestrian space decreases to 24 sf/ped or less (LOS D or worse). If the pedestrian space under the With-Action condition is greater than 24 sf/ped (LOS C or better), the impact should not be considered significant. If the average pedestrian space under the No-Action condition is between 5.0 and 26.6 sf/ped, a decrease in pedestrian space under the With-Action condition should be considered significant based on **Table H-7** which shows a sliding-scale that identifies what decrease in pedestrian space is considered a significant impact for a given amount of pedestrian space in the No-Action condition. If the decrease in pedestrian space is less than the value in **Table H-7**, the impact is not considered significant. If the average pedestrian space under the No-Action condition is less than 5.0 sf/ped, then a decrease in pedestrian space greater than or equal to 0.2 sf/ped should be considered significant.

TABLE H-6: Significant Impact Criteria for Sidewalks with Platooned Flow in a Non-CBD Location

No-Action Condition Pedestrian Flow (sf/ped)	With-Action Condition Pedestrian Flow Increment to be Considered a Significant Impact (sf/ped)
>44.3	With-Action Condition < 40.0
43.5 to 44.2	Reduction ≥ 4.3
42.5 to 43.4	Reduction ≥ 4.2
41.6 to 42.4	Reduction ≥ 4.1
40.6 to 41.5	Reduction ≥ 4.0
39.7 to 40.5	Reduction ≥ 3.9
38.7 to 39.6	Reduction ≥ 3.8
37.8 to 38.6	Reduction ≥ 3.7
36.8 to 37.7	Reduction ≥ 3.6
35.9 to 36.7	Reduction ≥ 3.5
34.9 to 35.8	Reduction ≥ 3.4
34.0 to 34.8	Reduction ≥ 3.3
33.0 to 33.9	Reduction ≥ 3.2
32.1 to 32.9	Reduction ≥ 3.1
31.1 to 32.0	Reduction ≥ 3.0
30.2 to 31.0	Reduction ≥ 2.9
29.2 to 30.1	Reduction ≥ 2.8
28.3 to 29.1	Reduction ≥ 2.7
27.3 to 28.2	Reduction ≥ 2.6
26.4 to 27.2	Reduction ≥ 2.5
25.4 to 26.3	Reduction ≥ 2.4
24.5 to 25.3	Reduction ≥ 2.3
23.5 to 24.4	Reduction ≥ 2.2
22.6 to 23.4	Reduction ≥ 2.1
21.6 to 22.5	Reduction ≥ 2.0
20.7 to 21.5	Reduction ≥ 1.9
19.7 to 20.6	Reduction ≥ 1.8
18.8 to 19.6	Reduction ≥ 1.7
17.8 to 18.7	Reduction ≥ 1.6
16.9 to 17.7	Reduction ≥ 1.5
15.9 to 16.8	Reduction ≥ 1.4
15.0 to 15.8	Reduction ≥ 1.3
14.0 to 14.9	Reduction ≥ 1.2
13.1 to 13.9	Reduction ≥ 1.1
12.1 to 13.0	Reduction ≥ 1.0
11.2 to 12.0	Reduction ≥ 0.9
10.2 to 11.1	Reduction ≥ 0.8
9.3 to 10.1	Reduction ≥ 0.7
8.3 to 9.2	Reduction ≥ 0.6
7.4 to 8.2	Reduction ≥ 0.5
6.4 to 7.3	Reduction ≥ 0.4
<6.3	Reduction ≥ 0.3

Source: 2021 *CEQR Technical Manual*

TABLE H-7: Significant Impact Criteria for Corners and Crosswalks in a Non-CBD Location

No-Action Condition Pedestrian Space (sf/ped)	With-Action Condition Pedestrian Space Reduction to be Considered a Significant Impact (sf/ped)
> 26.6	With-Action Condition < 24.0
25.8 to 26.5	Reduction ≥ 2.6
24.9 to 25.7	Reduction ≥ 2.5
24.0 to 24.8	Reduction ≥ 2.4
23.1 to 23.9	Reduction ≥ 2.3
22.2 to 23.0	Reduction ≥ 2.2
21.3 to 22.1	Reduction ≥ 2.1
20.4 to 21.2	Reduction ≥ 2.0
19.5 to 20.3	Reduction ≥ 1.9
18.6 to 19.4	Reduction ≥ 1.8
17.7 to 18.5	Reduction ≥ 1.7
16.8 to 17.6	Reduction ≥ 1.6
15.9 to 16.7	Reduction ≥ 1.5
15.0 to 15.8	Reduction ≥ 1.4
14.1 to 14.9	Reduction ≥ 1.3
13.2 to 14.0	Reduction ≥ 1.2
12.3 to 13.1	Reduction ≥ 1.1
11.4 to 12.2	Reduction ≥ 1.0
10.5 to 11.3	Reduction ≥ 0.9
9.6 to 10.4	Reduction ≥ 0.8
8.7 to 9.5	Reduction ≥ 0.7
7.8 to 8.6	Reduction ≥ 0.6
6.9 to 7.7	Reduction ≥ 0.5
6.0 to 6.8	Reduction ≥ 0.4
5.1 to 5.9	Reduction ≥ 0.3
< 5.0	Reduction ≥ 0.2

Source: 2021 *CEQR Technical Manual*

Street User Safety

Pursuant to *CEQR Technical Manual* guidelines, an evaluation of vehicular and pedestrian safety is needed for locations within the traffic and pedestrian study areas that have been identified as high crash locations. These are defined as locations along a Vision Zero corridor/intersection or where five or more pedestrian/bicyclist injury crashes have occurred in any consecutive 12 months of the most recent three-year period for which data are available. For these locations, crash trends would be identified to determine whether projected vehicular and pedestrian traffic would further impact safety, or whether existing unsafe conditions could adversely impact the flow of the projected new trips. The determination of potential significant safety impacts depends on the type of area where the project site is located, traffic volumes, crash types and severity, and other contributing factors. Where appropriate, measures to improve traffic and pedestrian safety should be identified and coordinated with NYCDOT.

Parking

Analysis Methodology

The parking analysis identifies the supply of on-street and off-street public parking near a proposed project and determines the extent to which the supply is utilized in existing conditions and in the future without and with a proposed action. The analysis considers anticipated changes in the study area's parking supply and demand, and compares project-generated parking demand with future parking availability to determine if a parking shortfall is likely to result. The displacement of existing parking capacity attributable to the proposed action or project is also considered. Typically, the analysis encompasses the parking facilities—public parking lots and garages and on-street curbside spaces—that vehicular traffic destined to the project site or area would likely utilize. According to the *CEQR Technical Manual*, a ¼-mile radius around a project site is generally assumed as the distance that someone driving to the site would be willing to walk.

A parking demand forecast for the Proposed Actions' RWCDS is provided to document the projected demand at the proposed 80-spaces of on-site accessory parking and the demand that would need to be accommodated on-street or at nearby off-street public parking facilities. As the Proposed Actions are predominantly commercial in nature (and therefore generate substantially less parking demand on weekends than on weekdays), and as demand from retail, office and light industrial/manufacturing uses typically peaks in the midday period and declines during the afternoon and evening, the parking analysis focuses on the weekday midday period.

Significant Shortfall Criteria

Should a proposed action generate the need for more parking than it provides, a shortfall of spaces may be considered significant. The availability of off-street and on-street parking spaces within a convenient walking distance (about a ¼-mile), as well as the availability of alternative modes of transportation, are considered in making this determination.

Under *CEQR Technical Manual* guidance, different criteria for determining significance are applied based on whether or not a proposed project is located in residential or commercial areas designated as Parking Zones 1 and 2 as shown in Map 16-2, "CEQR Parking Zones, May 2010," in the 2020 *CEQR Technical Manual*. As the proposed rezoning area is located within Zone 2 as shown in Map 16-2, the inability of the Proposed Actions or the surrounding area to accommodate future parking demands would be considered a parking shortfall, but would generally not be considered significant due to the magnitude of available alternative modes of transportation.

VI. PEDESTRIANS

Existing Conditions

As discussed previously in Section V "Level 2 Screening Assessment", three pedestrian elements (two sidewalks and one corner area) have been selected for detailed analysis as they are locations where project-generated pedestrian trips are expected to exceed the 200-trip *CEQR Technical Manual* analysis threshold. **Tables H-8 and H-9** show the existing average pedestrian space (in square feet per pedestrian) and levels of service at analyzed sidewalks and corner, respectively. As shown in **Tables H-8 and H-9**, all analyzed pedestrian elements currently operate at an uncongested LOS A or B in all analyzed peak hours.

Table H-8: Sidewalk Analysis – Existing Conditions

Location	Sidewalk	Effective Width (ft)	Peak Hour Volume				Average Pedestrian Space (ft^2/ped)				Platoon-Adjusted Level of Service			
			AM	MD	PM	SAT	AM	MD	PM	SAT	AM	MD	PM	SAT
Berry St Btwn N 12th St and N 13th St	West	5.8	73	108	211	657	898.1	495.8	328.1	116.2	A	B	B	B
N 13th St Btwn Wythe Ave and Berry St	South	5.0	81	65	31	45	762.6	852.9	1,992.7	985.5	A	A	A	A

Notes: Methodology based on *CEQR Technical Manual* guidelines
SFP – Square feet per pedestrian.
LOS – Level of Service.

Table H-9: Corner Analysis – Existing Conditions

Location	Corner	Average Pedestrian Space (ft^2/ped)				Level of Service			
		AM	MD	PM	SAT	AM	MD	PM	SAT
Wythe Ave & N 12th St	NE	547.9	289.6	431.9	158.6	A	A	A	A

Notes: Methodology based on *CEQR Technical Manual* guidelines
SFP – Square feet per pedestrian.
LOS – Level of Service.

The Future Without the Proposed Action (No-Action)

Increased pedestrian demand due to background growth was added to existing volumes to determine future volumes absent the Proposed Actions. An annual compounded background growth rate of 0.50 percent was applied to existing travel demand through 2025 pursuant to *CEQR Technical Manual* criteria. In addition, pedestrian volumes are expected to increase a result of the No-Action development projects in the surrounding area (see Attachment C, "Land Use, Zoning and Public Policy,").

Tables H-10 and H-11 show the forecasted No-Action average pedestrian space and LOS along the analyzed sidewalks and corner, respectively, during the weekday AM, midday, PM, and Saturday peak hours. As shown in **Tables H-10 and H-11**, under No-Action conditions, all analyzed pedestrian elements would continue to operate at an acceptable LOS C or better in all peak hours, with the exception of the west sidewalk along Berry Street between North 12th and North 13th Street which operates at LOS D during the Saturday peak hour.

Table H-10: Sidewalk Analysis – 2025 No-Action Conditions

Location	Sidewalk	Effective Width (ft)	Peak Hour Volume				Average Pedestrian Space (ft^2/ped)				Platoon-Adjusted Level of Service			
			AM	MD	PM	SAT	AM	MD	PM	SAT	AM	MD	PM	SAT
Berry St Btwn N 12th St and N 13th St	West	5.8	577	937	1,256	1,914	113.2	56.2	54.2	38.7	B	C	C	D
N 13th St Btwn Wythe Ave and Berry St	South	5.0	93	94	79	123	664.2	589.7	781.9	360.4	A	A	A	B

Notes: Methodology based on *CEQR Technical Manual* guidelines
SFP – Square feet per pedestrian.
LOS – Level of Service.

Table H-11: Corner Analysis – 2025 No-Action Conditions

Location	Corner	Average Pedestrian Space (ft^2/ped)				Level of Service			
		AM	MD	PM	SAT	AM	MD	PM	SAT
Wythe Ave & N 12th St	NE	194.2	127.7	120.5	70.2	A	A	A	A

Notes: Methodology based on *CEQR Technical Manual* guidelines
SFP – Square feet per pedestrian.
LOS – Level of Service.

The Future With the Proposed Action (With-Action)

As discussed previously, the Proposed Actions' RWCDS is expected to generate a net total of 364, 690, 576 and 874 pedestrian trips (including walk-only trips and pedestrians en route to and from subway stations, bus stops, ferry landings, and off-site parking) during the weekday AM, midday, PM and Saturday peak hours, respectively (refer to **Table H-4**). These pedestrian volumes were added to the projected No-Action volumes to generate the With-Action pedestrian volumes for analysis which were used to determine the pedestrian elements for analysis. The analyzed pedestrian elements are shown in **Figure H-3**. It should be noted that as part of the Proposed Project, the analyzed west sidewalk on Berry Street between North 12th and North 13th Streets would be widened by approximately 3 feet adjacent to the Development Site (from 12 feet wide to 15 feet wide). As such, this change was reflected in the With-Action pedestrian analyses.

Tables H-12 and H-13 shows the average pedestrian space and levels of service at the analyzed sidewalk during each analyzed peak hour under the 2025 With-Action conditions. As shown in **Table H-12**, under the With-Action conditions, all analyzed pedestrian elements would operate at an acceptable LOS C or better in all peak periods. It should be noted that the west sidewalk on Berry Street between North 12th and North 13th Streets, which operated at LOS D during the Saturday peak hour, would operate at LOS C or better during all peak periods due to the 3-feet sidewalk widening as part of the Proposed Project. Therefore, based on *CEQR Technical Manual* criteria, the Proposed Action would not result in any significant adverse impacts to any analyzed pedestrian elements in any peak hour.

Table H-12: Sidewalk Analysis – 2025 With-Action Conditions

Location	Sidewalk	Effective Width (ft)	Project Increment				Peak Hour Volume				Average Pedestrian Space (ft^2/ped)				Platoon-Adjusted Level of Service			
			AM	MD	PM	SAT	AM	MD	PM	SAT	AM	MD	PM	SAT	AM	MD	PM	SAT
Berry St Btwn N 12th St and N 13th St	West	8.8	197	274	291	453	774	1,211	1,547	2,367	127.9	66.2	67.0	47.9	B	C	C	C
N 13th St Btwn Wythe Ave and Berry St	South	5.0	217	292	276	219	310	386	355	342	199.0	143.2	173.7	129.3	B	B	B	B

Notes: Methodology based on *CEQR Technical Manual* guidelines
SFP – Square feet per pedestrian.
LOS – Level of Service.

Table H-13: Corner Analysis – 2025 With-Action Conditions

Location	Corner	Average Pedestrian Space (ft^2/ped)				Level of Service			
		AM	MD	PM	SAT	AM	MD	PM	SAT
Wythe Ave & N 12th St	NE	176.2	105.2	105.7	59.7	A	A	A	B

Notes: Methodology based on *CEQR Technical Manual* guidelines
SFP – Square feet per pedestrian.
LOS – Level of Service.

VII. PARKING

Existing Conditions

Off-Street Parking

Off-street public parking facilities were inventoried during June 2021 and a total of three public parking garages were identified within ¼-mile of the Development Site. **Figure H-4** shows the locations of these off-street public parking facilities and **Table H-14** provides a summary of their names, addresses, license numbers, capacities, and estimated weekday midday utilization.

Field observations and interviews with parking attendants were used to determine the utilization levels of each parking facility during the midday (noon to 2:00 p.m.) period on a typical weekday. As shown in **Table H-14**, the three parking garages have a combined licensed capacity of 567 spaces. During the midday period, approximately 51 percent of spaces are utilized, leaving a residual supply of approximately 280 available parking spaces.

TABLE H-14: Existing Off-Street Public Parking Facilities

Map No.	Name	Address	License No.	Hours of Operation	Licensed Capacity	Weekday Midday	
						Estimated Utilization (%)	Available Capacity
1	City Parking	82 North 13th Street	2096606	6 AM - 12 AM Weekdays, 7 AM - 12 AM Weekends	275	50%	138
2	William Vale Hotel	111 N 12th Street	N/A	24 Hrs Daily	90	72%	25
3	Lot #27	173 N 11th Street	1474717	24 Hrs Daily	202	42%	117
				Total:	**567**	**51%**	**280**

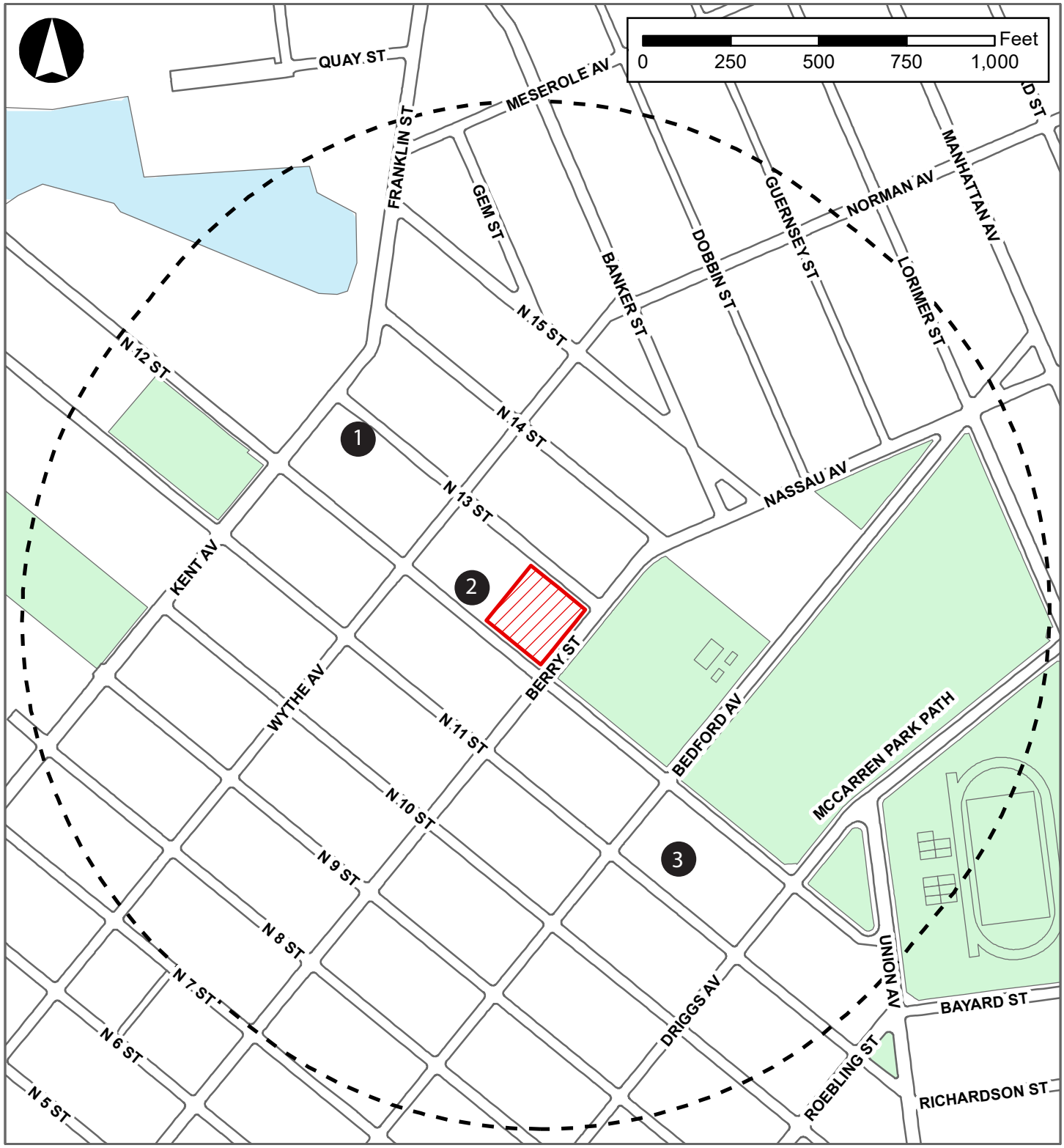
Note: Conservatively assumes full utilization at 98 percent of licensed capacity per *CEQR Technical Manual* guidance
Source: June 2021 PHA field surveys and interviews with parking facility operators

On-Street Parking

An inventory of existing parking regulations within ¼-mile of the Development Site was compiled from field surveys and on-line sources. On-street public parking is generally governed by alternate-side-of-the-street regulations to facilitate street cleaning, as well as more restrictive no standing regulations at locations where additional traffic flow capacity is needed. Based on existing curbside parking regulations, and taking into account curb space obstructed by curb cuts, fire hydrants, and other impediments, there are a total of approximately 1,597 legal curbside parking spaces in the midday within ¼-mile of the Development Site. Based on data collected during field surveys conducted in April 2018 and May 2021[3], on-street parking within the overall parking study area is approximately 98 percent utilized in the weekday midday. Approximately 27 on-street parking spaces are currently available within the study area during this period.

[3] The June 2018 data was grown to 2021 using a background growth rate of 0.5 percent per year for the 2018 - 2021 period, consistent with the rates recommended in the *CEQR Technical Manual* for projects in Brooklyn.

Figure H-4
Off-Street Parking Facilites



Legend

Development Site

1/4-Mile Radius

1 Off-Street Parking Facility

The Future Without the Proposed Actions (No-Action Condition)

Between 2021 and 2025, it is expected that transportation demands in the vicinity of the Development Site will increase due to long-term background growth, new uses on the Development Site, and other planned developments unrelated to the Proposed Actions. As shown in **Table H-1**, under the No-Action RWCDS, the Development Site is assumed to be occupied by approximately 10,000 gsf of light industrial uses and 30,000 gsf of local retail uses. No parking would be provided on-site under the No-Action condition. As such, the incremental No-Action demand is expected to utilize off-street public parking facilities or park on-street.

The forecast of future No-Action parking conditions also considers the potential for new demand from the planned developments listed in Attachment C, "Land Use, Zoning and Public Policy." Auto trip forecasts were used to forecast the parking demands from these developments except where site-specific data were available from secondary sources such as previous environmental studies. In addition, the forecast of future No-Action parking conditions incorporates annual background growth rates of 0.5 percent per year for the 2021 through 2025 period. This background growth rate, recommended in the *CEQR Technical Manual* for projects in Brooklyn outside of the Downtown area, are applied to account for smaller projects and as-of-right developments not reflected in Attachment C, and general increases in parking demand not attributable to specific development projects.

Off-Street Parking

As shown in **Table H-15**, based on the increased demand under the No-Action RWCDS, midday off-street public parking demand within the overall parking study area is expected to total approximately 61 percent of capacity, with a surplus of 216 spaces during this period.

TABLE H-15: No-Action Off-Street Public Parking Capacity, Demand and Utilization

	Midday
Capacity	
Existing Capacity[1]	556
Capacity Displaced by No-Action Developments[2]	0
Total No-Action Capacity	556
Demand	
Existing Demand	288
Demand From Background Growth[3]	6
Incremental Demand from the No-Action RWCDS[4]	17
Incremental Demand from Off-Site No-Action Developments[5]	29
Total No-Action Demand	340
Utilization	
No-Action Utilization	61%
No-Action Off-Street Parking Surplus/(Deficit)	216

Notes: [1]Analysis conservatively assumes that facilities are fully utilized at 98 percent of licensed capacity.
[2]No existing public parking facilities are expected to be displaced by new development in the No-Action condition.
[3]Reflects annual background growth rates of 0.5 percent/year for the 2021 through 2025 period.
[4]Demand from No-Action land uses on the Development Site.
[5]Demand from developments in proximity to the Development Site unrelated to the Proposed Actions and not accommodated by accessory parking.

On-Street Parking

After accounting for background growth and demand from No-Action land uses on the Development Site and in the surrounding area not otherwise accommodated by accessory parking, the demand for on-street parking within the study area is expected to increase to 1,602 spaces in the midday period. **Table H-16** shows that in the future without the Proposed Actions, on-street parking within ¼-mile of the Development Site is expected to be operating at approximately 101 percent of capacity with a deficit of 5 spaces in the weekday midday versus an existing surplus of 27 spaces.

Overall, in the future without the Proposed Actions, the combined supply of on-street and public off-street parking capacity within ¼-mile of the Development Site would be sufficient to accommodate demand during the weekday midday. It is estimated that there would be a surplus of 211 parking spaces in the study area during this period.

TABLE H-16: No-Action On-Street Parking Capacity, Demand and Utilization

	Midday
Capacity	
Existing Capacity[1]	1,597
Net Change in No-Action Parking Supply[2]	0
Total No-Action Capacity	1,597
Demand	
Existing Demand[1]	1,570
Demand From Background Growth[3]	32
Off-Street Public Parking Deficit[4]	0
Total No-Action Demand	1,602
Utilization	
No-Action Utilization	101%
No-Action On-Street Parking Surplus/(Deficit)	(5)

Notes: [1]Based on April 2018 and June 2021 field surveys. Excludes authorized vehicle parking.
[2]No changes to on-street parking spaces existing are expected to be implemented in the No-Action condition.
[3]Reflects annual background growth rates of 0.5 percent/year for the 2021 through 2025 period.
[4]Demand from No-Action land uses on the Development Site and from unrelated developments in the vicinity not otherwise accommodated by accessory parking.

The Future With the Proposed Actions (With-Action Condition)

Under the Proposed Actions, no existing on-street or off-street public parking would be displaced, and it is anticipated that a total of 80 accessory parking spaces would be provided on the Development Site. The on-site accessory parking would be utilized by the office and light industrial uses.

Table H-17 shows a forecast of the total hourly parking demand that would be generated at the Development Site on a weekday under the Proposed Actions. (As the proposed project is predominantly commercial in nature, there is expected to be substantially less parking demand on weekends than on weekdays.) The parking forecast was derived from the forecast of daily auto trips from the proposed uses on the Development Site. As shown in **Table H-17**, weekday parking demand generated by the Proposed Actions' RWCDS would peak at approximately 120 spaces in the midday period (1-2 PM) period. During that period (1-2 PM), the parking accumulation for the office and light industrial uses would peak with 71 spaces, which would be fully accommodated on-site. In addition, the parking accumulation for the local retail and restaurant uses would peak with approximately 49 spaces during this period. As parking would

not be provided on-site for the local retail and restaurant uses on weekdays, there would be a shortfall of approximately 49 spaces. Compared to the No-Action condition (which generated an off-site parking demand of 17 spaces during this period), net incremental midday parking demand from the Proposed Actions would total approximately 32 spaces at off-street public parking facilities and on-street.

TABLE H-17: Total Weekday Hourly Parking Accumulation Under the Proposed Actions' RWCDS

	Local Retail* 47,171 gsf			Office 124,224 gsf			Restaurant 13,166 gsf			Light Industrial 32,990 gsf			Total Parking Accumulation		
Time	**In**	**Out**	**Accu.**	**In**	**Out**	**Accu.**	**In**	**Out**	**Accu.**	**In**	**Out**	**Accu.**	**In**	**Out**	**Accu.**
Overnight			2												2
12-1 AM	1	1	2	0	0	0	0	0	0	0	0	0	1	1	2
1-2	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1
2-3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3-4	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
4-5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-6	1	1	0	1	0	1	0	0	0	0	0	0	2	1	1
6-7	1	1	0	2	0	3	0	0	0	0	0	0	3	1	3
7-8	9	7	2	5	1	7	1	0	1	2	0	2	17	8	12
8-9	16	14	4	14	1	20	2	0	3	19	3	18	51	18	45
9-10	28	24	8	26	4	42	3	0	6	16	3	31	73	31	87
10-11	31	28	11	5	3	44	4	1	9	1	2	30	41	34	94
11-12	32	32	11	3	3	44	8	1	16	1	3	28	44	39	99
12-1 PM	38	37	12	2	2	44	16	4	28	1	1	28	57	44	112
1-2	43	43	12	2	3	43	19	10	37	0	0	28	64	56	**120**
2-3	45	43	14	3	4	42	4	21	20	4	1	31	56	69	107
3-4	46	44	16	4	5	41	2	8	14	2	2	31	54	59	102
4-5	45	47	14	4	8	37	4	9	9	2	11	22	55	75	82
5-6	49	49	14	3	21	19	10	5	14	4	21	5	66	96	52
6-7	58	58	14	2	12	9	16	4	26	1	6	0	77	80	49
7-8	40	45	9	2	6	5	14	6	34	0	0	0	56	57	48
8-9	27	29	7	1	3	3	1	15	20	0	0	0	29	47	30
9-10	14	18	3	1	2	2	0	14	6	0	0	0	15	34	11
10-11	6	6	3	0	1	1	0	6	0	0	0	0	6	13	4
11-12	4	5	2	0	1	0	0	0	0	0	0	0	4	6	2
Total	*534*	*534*		*80*	*80*		*104*	*104*		*53*	*53*				

Notes: *25% linked- trip credit applied to Local Retail use
Peak hours highlighted and peak parking accumulation in **BOLD**

Off-Street Parking

A comparison of estimated No-Action and With-Action parking demand and capacity at study area off-street public parking facilities is provided in **Table H-18**. As shown in **Table H-18**, under the Proposed Actions, off-street public parking in proximity to the Development Site would be operating at approximately 67 percent of capacity in the midday period with a surplus of approximately 184 spaces.

On-Street Parking

As shown in **Table H-19**, compared to the No-Action RWCDS, development associated with the Proposed Actions would not result in a net increase in study area on-street parking demand in the weekday midday period. Therefore, similar to No-Action conditions, on-street parking demand within ¼-mile of the Development Site would total approximately 1,602 spaces in the weekday midday, and utilization would remain at 101 percent of capacity with the Proposed Actions. There would be a deficit of approximately 5 on-street parking spaces within the study area in the midday period, similar to No-Action conditions.

TABLE H-18: With-Action Off-Street Public Parking Capacity, Demand and Utilization

	Midday
Capacity	
No-Action Capacity	556
Capacity Displaced by With-Action Developments[1]	0
Total With-Action Capacity	556
Demand	
No-Action Demand	340
Incremental Demand from the Proposed Actions[2]	32
Total With-Action Demand	372
Utilization	
With-Action Utilization	67%
With-Action Off-Street Parking Surplus/(Deficit)	184

Notes: [1]No changes to off-street public parking capacity are expected to result from the Proposed Actions.
[2]Incremental demand from With-Action land uses on the Development Site not accommodated by accessory parking.

TABLE H-19: With-Action On-Street Public Parking Capacity, Demand and Utilization

	Midday
Capacity	
Total With-Action Capacity[1]	1,597
Demand	
No-Action Demand	1,602
Incremental Demand from the Proposed Actions[2]	0
Total With-Action Demand	1,602
Utilization	
With-Action Utilization	101%
With-Action On-Street Parking Surplus/(Deficit)	(5)

Notes: [1]No changes to on-street parking capacity are expected to result from the Proposed Actions.
[2]Demand from With-Action land uses on the Development Site not otherwise accommodated by on-site accessory parking or in off-street public parking facilities.

As discussed in Section IV, "Transportation Analysis Methodologies," in this area of Brooklyn the inability of a proposed action or the surrounding area to accommodate future parking demands would be considered a parking shortfall, but would generally not be considered significant under *CEQR Technical Manual* guidance due to the magnitude of available alternative modes of transportation. The shortfall in on-street public parking spaces during the weekday midday period under the Proposed Actions would therefore not be considered a significant adverse parking impact. In addition, as previously mentioned, there is an off-street parking surplus of 184 spaces, which could accommodate the total on-street shortfall of 5 spaces.

In summary, in the future with the Proposed Actions there would be a surplus of approximately 179 spaces of on-street and off-street public parking capacity within ¼-mile of the Development Site in the weekday midday period. Therefore, the Proposed Actions are not expected to result in significant adverse parking impacts during the weekday midday peak period for commercial and retail parking demand.

ATTACHMENT I

AIR QUALITY

I. INTRODUCTION

Ambient air quality, or the quality of the surrounding air, may be affected by air pollutants produced by motor vehicles, referred to as "mobile sources"; by fixed facilities, usually referenced as "stationary sources"; or by a combination of both. Under the City Environmental Review (CEQR), an air quality assessment determines both a proposed project's effects on ambient air quality and the effects of ambient air quality on the project. This attachment assesses the potential for the Proposed Actions and subsequent Proposed Project to result in significant adverse air quality impacts. The Applicant is seeking a zoning map amendment, a zoning text amendment, and a special permit to facilitate the development of a new ten-story, 135-foot tall (roof height) mixed-use commercial and light industrial/manufacturing building on the boarder of the Greenpoint and Williamsburg neighborhoods of Brooklyn Community District (CD) 1.

As detailed in **Attachment A, "Project Description,"** Industrial Business Incentive Areas (IBIA) regulations require the inclusion of Required Industrial Uses in order for the Proposed Project to achieve a maximum allowable floor area beyond the 2.0 FAR limitation on commercial and manufacturing uses of the underlying M1-2 district. The presence of light industrial/manufacturing uses within the Proposed Project requires the consideration of the potential impacts of toxic pollutant emissions on nearby sensitive land uses. Therefore, a stationary analysis of toxic pollutant emissions is warranted for the Proposed Actions. The number and types of light industrial/manufacturing uses that would operate within the Proposed Project are not currently known and these uses could vary to accommodate current and future market demand. Therefore, it was conservatively assumed that typical tenants would be small-scale, light industrial/manufacturing tenants (particularly Use Groups 9, 11, and 17) that are permissible pursuant New York City zoning regulations for IBIAs. The stationary analysis of toxic pollutant emissions presented herein was conducted using procedures provided in the 2021 *CEQR Technical Manual*, as well as assumptions and methodologies utilized in previously approved environmental assessments for IBIA development projects.

The Proposed Project is similar to the approved applications for IBIA development projects located at 25 Kent Avenue (CEQR No: 16DCP065K; ULURP Nos: C 160124 ZSK; C 160125 ZSK; N 160126 ZRK) and 103 North 13th Street (CEQR No: 18DCP182K, ULURP Nos: N 190083 ZRK; C 190084 ZSK; C 190085 ZSK), both of which allocated a portion of their floor area to accommodate light industrial/manufacturing uses pursuant to IBIA regulations. Due to similarities between the Proposed Project and these three previously approved applications, the same approach and methodology was utilized for the Proposed Project.

In addition to the stationary analysis of toxic pollutant emissions, in accordance with *CEQR Technical Manual* guidance, an analysis was conducted to determine whether the emissions from the Proposed Project's heating, ventilation, and air conditioning (HVAC) system would have the potential to result in a significant adverse impact to nearby sensitive land uses. The Proposed Project would utilize an electric HVAC system that will be electrically powered; the HVAC system would not require on-site combustion. Therefore, only on-site combustion for the Proposed Project's hot water system was considered in the stationary source analysis of HVAC emissions.

As presented in **Attachment H, "Transportation,"** compared to the reasonable worst-case development scenario (RWCDS) No-Action conditions, the Proposed Actions would result in a net increase of

approximately 87, 98, 105, and 104 total vehicle trips (autos, taxi, and trucks combined) during the weekday AM, weekday midday, weekday PM, and Saturday peak hours, respectively, which would be distributed throughout the street network surrounding the Development Site. As such, the Proposed Actions would not exceed the City Environmental Quality Review (CEQR) Technical Manual carbon monoxide (CO) screening threshold of 170 peak-hour vehicle trips at any intersection in the study area. However, as the Proposed Actions would result in an increase in net vehicle trips, an analysis of the peak hour heavy-duty diesel vehicle (HDDVs) traffic or its equivalent in vehicular emissions is warranted. Therefore, an assessment to determine if particulate matter (PM) emission exceed the screening threshold discussed in Chapter 17, Sections 210 and 311 of the CEQR Technical Manual is included below.

II. AIR QUALITY STANDARDS, REGELATIONS, AND BENCHMARKS

Criteria Pollutants

The EPA has established national ambient air quality standards (NAAQS) for six of the most common air pollutants—known as "criteria" pollutants. The presence of these pollutants in ambient air is generally due to numerous diverse and widespread sources of emissions. The NAAQS primary standards are designed to protect public health with adequate margin of safety. The NAAQS secondary standards are designed to protect the public welfare from adverse effects, including those related to effects on soils, water, vegetation, visibility, and other aspects. As required by the Clean Air Act, EPA periodically conducts comprehensive reviews of the scientific literature on health and welfare effects associated with exposure to the criteria air pollutants. The NAAQS have been adopted as the ambient air quality standards for the State of New York.

The New York State Department of Environmental Conservation (NYSDEC) measures air pollutants at more than 50 sites across the state using continuous and/or manual instrumentation. These sites are a mix of federally-mandated and supplemental monitoring networks. The primary NAAQS and background concentrations from the nearest federally-mandated monitoring station(s) are presented in **Table I-1.**

Table I-1: NAAQS and Background Concentration Published in the NYSDEC 2019 Report

Pollutant	Averaging Period	National and State Standards	Background Concentration	Monitoring Station
NO_2	1-Hour	188 µg/m³	110.5 µg/m³	IS 52
	Annual	100 µg/m³	31.8 µg/m³	
$PM_{2.5}$	24-Hour	35 µg/m³	17.8 µg/m³	JHS 126
	Annual	12 µg/m³	7.6 µg/m³	
PM_{10}	24-Hour	150 µg/m³	43 µg/m³	Division Street
CO	1-Hour	35 ppm	1.87 ppm	CCNY
	8-Hour	9 ppm	1.30 ppm	
SO_2	1-Hour	196 µg/m³	14.6 µg/m³	IS 52
	Annual	80 µg/m³	1.1 µg/m³	

NO_2 NAAQS

The 1-hour nitrogen dioxide (NO_2) NAAQS was promulgated in the United States in February 2010. The 1-hour standard is based on a percentile rank from the annual distribution of daily maximum 1-hour values, averaged across the number of years processed. The 1-hour NO_2 modeled design value is based on the

98th percentile, or 8th highest, of the daily maximum 1-hour values across the year. For typical multi-year modeling analysis based on 5 years of National Weather Service (NWS) meteorological data, the modeled design value is the 5-year average of the 8th highest values for NO_2.

Nitrogen oxides (NOx) emissions from combustion consist predominantly of nitric oxide (NO) at the source. The NOx in these emissions is then gradually converted to NO_2. For determining compliance with the 1-hour standard, the EPA has developed a three-tiered modeling approach: a) Tier 1, the most conservative approach, assumes a full (100%) conversion of NOx to NO_2. b) Tier 2 is the Ambient Ratio Method 2 (ARM2) which assumes ambient equilibrium between NO and NO_2. ARM2 adjusts the modeled NOx concentrations based on an empirical relationship between ambient NOx and ambient NO_2 concentrations (the national default minimum and maximum ambient ratios for the primary facility are 0.5 and 0.9, respectively.) c) Tier 3, which is the most precise approach, accounts for the chemical transformation of NO emitted from the stack to NO_2 within the source plume using hourly ozone background concentrations.

NYC Guidelines - Determining the Significance of Air Quality Impacts

The City's *de minimis* criteria set allowable incremental increase in CO and $PM_{2.5}$ concentrations that would result as a consequence of a proposed project. CO criteria set the minimum change in 8-hour average concentration that constitutes a significant environmental impact. Significant increase of CO concentrations in New York City are:

- An increase of 0.5 parts per million (ppm) or more in the maximum 8-hour average CO concentration at a location where the predicted No-Action 8-hour concentration is equal to 8 ppm or between 8 ppm and 9 ppm; or

- An increase of more than half the difference between baseline (i.e., No-Action) concentrations and the 8-hour standard, when No-Action concentrations are below 8 ppm.

The following criteria are used for determination of significant adverse $PM_{2.5}$ incremental impacts for projects subject to the CEQR:

- Predicted 24-hour maximum $PM_{2.5}$ concentration increase of more than half the difference between the 24-hour background concentration and the 24-hour standard; or

- Predicted annual average $PM_{2.5}$ concentration increments greater than 0.1 $\mu g/m^3$ at ground level on a neighborhood scale (i.e., the annual increase in concentration representing the average over an area of approximately 1 square kilometer, centered on the location where the maximum ground-level impact is predicted for stationary sources; or for mobile sources, at a distance from a roadway corridor similar to the minimum distance defined for locating neighborhood scale monitoring stations); or

- Predicted annual average $PM_{2.5}$ concentration increments greater than 0.3 $\mu g/m^3$ at any receptor location for stationary sources.

Accordingly, the 8-hour CO *de minimis* is 3.85 ppm, and $PM_{2.5}$ *de minimis* are 24-hour $PM_{2.5}$ concentration increment of 8.6 $\mu g/m^3$, and annual $PM_{2.5}$ concentration increments of 0.3 $\mu g/m^3$ for stationary source and 0.1 $\mu g/m^3$ for mobile source.

Non-Criteria Pollutants

The NYSDEC Department of Air Resources established short-term (one-hour) and annual concentrations standards for certain noncriteria pollutants. The standards are acceptable ambient levels for these pollutants, which are based on human exposure. The New York State standards for noncriteria pollutants are published in the DAR-1 guidance document (version dated February 12, 2021). DAR-1 presents Annual and Short-Term Guideline Concentrations (AGCs and SGCs, respectively) for contaminants that range in toxicity from high to low. The AGCs and SGCs are annual and 1-hour guideline concentrations, respectively, for potentially toxic or carcinogenic air contaminants. In addition, NYSDEC also regulates pollutants that produce discomfort due to odors, where significant discomfort is evaluated on quantity, characteristic, or duration. The AGC and SGC concentration standards of compounds that could be emitted from the Proposed Actions manufacturing or processing operations are presented in **Table I-2**.

Table I-2: Relevant Noncriteria Pollutants Guidelines - NYSDEC

Pollutant Name	CAS Number	SGC ($\mu g/m^3$)	AGC ($\mu g/m^3$)	Note
Methyl Chloroform	00071-55-6	9000	5000	Hazardous Air Pollutants (HAP) or Other Carcinogen [2]
Hydrogen Cyanide	00074-90-8	340	0.8	
Dibutyl Phthalate	00084-74-2	---	12	
Toluene	00108-88-3	37000	5000	
Sodium Cyanide	00143-33-9	380	3.5	
Copper Cyanide	00544-92-3	380	3.5	
Xylene Mixt	01330-20-7	22000	100	
Lead Oxide	07439-92-1	---	0.038	
Zinc	07440-66-6	---	45	
Hydrogen Chloride	07647-01-0	2100	20	
Glycerin	00056-81-5	No CAS	No CAS	
Ethanol	00064-17-5	---	45000	
Isopropyl Alcohol	00067-63-0	98000	7000	
Acetone	00067-64-1	180000	30000	
Butoxyethanol, 2-	00111-76-2	4700	1600	
Butyl Acetate	00123-86-4	71300	565	
Ethyl Acetate	00141-78-6	---	3400	
Carbon Monoxide	00630-08-0	40000	N.A.	
Iron Oxide	01309-37-1	---	12	
Lead Oxide	01309-60-0	---	0.044	
Aluminum	07429-90-5	---	2.4	
Copper	07440-50-8	100	0.48	
Zinc Chloride	07646-85-7	200	2.4	
Ammonia	07664-41-7	2400	500	
Nitric Acid	07697-37-2	86	12.3	
VM&P Naphtha	08032-32-4	---	900	

Notes: [1]Source: NYSDEC, DAR-1 AGC/SGC Tables, Feb. 2021.

[2]Hazardous Air Pollutants (HAP), or AGC equivalent to one in a million excess cancer risk, or ACGIH Human Carcinogen, or ACGIH Suspected Human Carcinogen.

Of the chemicals presented in **Table I-2**, Methyl Chloroform, Hydrogen Cyanide, Dibutyl Phthalate, Toluene, Sodium Cyanide, Copper Cyanide, Xylene Mixt, Lead Oxide, Zinc, Hydrogen Chloride are carcinogens, listed Hazardous Air Pollutants (HAPs) by the EPA. In addition to evaluating each chemical with its AGCs standard, cumulative noncriteria pollutants concentration is evaluated with the inhalation risk or the hazardous quotient. The inhalation risk is applicable to carcinogens pollutants and the hazardous quotient is applicable to non-carcinogenic pollutant.

III. Mobile Source

According to the *CEQR Technical Manual,* projects may result in significant mobile source air quality impacts when they increase or cause a redistribution of traffic, create any other mobile sources of pollutants (e.g., diesel trains, helicopters, boats), or add new uses near mobile sources (e.g., roadways, garages, parking lots). Detailed analyses are required to predict whether a proposed action could potentially result in a significant adverse air quality impact if certain threshold criterions are met or exceeded. A proposed action that does not meet or exceeds the threshold criterions (screens out) is not expected to result in a mobile source impact(s).

Screening Assessment

Screening assessment for the project's peak hour vehicle traffic and peak hour heavy-duty diesel vehicle (HDDVs) traffic are presented in this section. Per the *CEQR Technical Manual*, a detailed analysis for carbon monoxide (CO) is required if the generated peak hour auto traffic or diversion of existing peak hour traffic would result in an increment of 170 auto trips in the area surrounding the Development Site. A detailed analysis for particles with an aerodynamic diameter of less than or equal to 2.5 micrometers ($PM_{2.5}$) is required if the generated peak hour HDDVs traffic or its equivalent in vehicular emissions, depending on the type of road, would be met or exceeded.

Based on the transportation trip assignment provided in **Attachment H, "Transportation,"** the Proposed Actions would not result in 170 or more peak hour vehicle-trip ends at any intersection. Therefore, a detailed CO analysis is not required.

The $PM_{2.5}$ equivalent truck calculation in vehicular emission screen ranges from 12 to 23 HDDVs depending on the type of road. All autos were assumed to be LDGT1 class vehicles, based on guidance from the New York City Department of City Planning (DCP) on similar projects. Project-generated traffic on the most effected roadways, based on the trip assignment Level 2 screening provided in **Attachment H, "Transportation,"** was used to calculate the HDDVs or its equivalent in vehicular emissions. **Table I-3** shows the project-generated traffic by vehicle type and the results of the *CEQR Technical Manual* Equivalent Truck Calculation.

As shown in **Table I-3**, the Proposed Project's $PM_{2.5}$ equivalent truck calculation of vehicular emissions exceeds the HDDVs screening threshold criterion during at least one peak period at all analysis locations. The worst-cases exceedances, as shown in **Table I-3**, is on North 13th Street at the intersection of Berry Street. As such, a detailed analysis was conducted for this intersection.

Table I-3: Proposed Actions Peak-hour Traffic

Roadway	Roadway Classification (Threshold HDDVs screen) [1]	Peak-Hour Period	Truck Per Hour	Auto Per Hour	Equivalent Truck	Pass / Fail
North 13th Street – Site to Wythe Avenue	Local (12)	AM	10	24	19.9	Fail
		Midday	4	34	19.7	Fail
		PM	0	47	22.7	Fail
		SAT	0	42	20.2	Fail
North 13th Street – Site to Berry Street	Local (12)	AM	2	43	22.4	Fail
		Midday	4	27	16.3	Fail
		PM	0	48	23.1	Fail
		SAT	0	31	14.9	Fail
Berry Street	Local (12)	AM	2	40	20.9	Fail
		Midday	3	19	11.7	Pass
		PM	0	20	9.6	Pass
		SAT	0	21	10.1	Pass
Wythe Avenue	Local (12)	AM	4	8	7.2	Pass
		Midday	2	15	8.9	Pass
		PM	0	30	14.5	Fail
		SAT	0	19	9.2	Pass

Note: [1]Roadway classification obtained from the New York State Department of Transportation (NYSDOT) map application (Nov. 2021). https://gis3.dot.ny.gov/html5viewer/?viewer=FC.

The projected number of new parking spaces to be added as part of the Proposed Development is evaluated with a threshold criterion to predict whether the potential impacts associated with mobile source emissions could be significant, based on DCP guidance on similar projects. If the threshold is met or exceeded, a detailed analysis is warranted. The Proposed Actions would facilitate 80 spaces parking garage. As the Proposed Project incremental new off-street parking spaces is less than 85 spaces, the Proposed Actions screens out and no detailed analysis is required, based on DCP guidance on similar projects. Therefore, a detailed parking analysis is required. In addition, the Proposed Project is not located near an atypical roadway.

Project-Generated Traffic Detailed Analysis

A $PM_{2.5}$ detailed analysis was conducted for the intersection of North 13th Street and Berry Street using the EPA Motor Vehicle Emission Simulator (MOVES) version 2014b and CAL3QHCR. The AM peak hour traffic was analyzed because the combined equivalent truck calculation vehicular emissions on both North 13th Street and Berry Street are greatest during that period. Existing vehicle count and classification for North 13th Street and Berry Street were obtained from the noise analysis detailed in **Attachment J, "Noise**." Traffic annual background growth rate, obtained from the *CEQR Technical Manual,* was used to project the No-Action traffic. The project-increment was added to the No-Action traffic to project the With-Action traffic.

Utilizing MOVES2014b, vehicular emissions were compiled. Fugitive dust emissions were added to the MOVES output to calculate the short-term $PM_{2.5}$ emission factors (annual fugitive dust emissions are negligible, based on similar projects). Slit loading factor of 0.4 gram per meter square was obtained from the *CEQR Technical Manual*. In addition, a conservative assumptions of "dry" road conditions was used for the short-term calculation (precipitation reduced silt loading).

A dispersion analysis was conducted utilizing the EPA's CAL3QHCR dispersion model version 13196. $PM_{2.5}$ concentrations were predicted with model-ready LaGuardia Airport meteorology data and the model

specified the settling and deposition velocities of 0-meter per second, 60-minute averaging time, and urban surface roughness of 175-centimeter (applicable to office land use). Links were modeled as free flowing and at-grade. Short-term receptors were placed in spaced intervals in the middle of sidewalks at 1.8-meter height around the analyzed intersection. Annual receptors were placed 15-meters from the curb side at 1.8 meters height in spaced intervals. Satellite imagery was used to locate links and receptors.

The With-Action 24-hour $PM_{2.5}$ concentration and the annual $PM_{2.5}$ increment between the With-Action and No-Action concentration were evaluated with the NYC Guideline, *de minimis*. **Table I-4** shows the dispersion analysis results.

Table I-4: Mobile Source $PM_{2.5}$ Dispersion Analysis Results

Pollutant and Averaging Time	Increment (Modeled) Concentration	Threshold Concentration	Threshold Standard
$PM_{2.5}$ 24-hour	0.77 µg/m^3	8.15 µg/m^3	*de minimis*
PM2.5 Annual	0.009 µg/m^3	0.1 µg/m^3	*de minimis*

Note: Annual PM2.5 concentration correspond to the With-Action traffic. As the total concentration is less than the de minimis, no analysis is needed for the No-Action scenario.

As shown in **Table I-4**, the Proposed Project's $PM_{2.5}$ increment concentrations do not exceed the *de minimis* (24-hour or annual averaging time periods). Therefore, no significant adverse air quality impact is expected as a result of the Proposed Actions.

IV. Stationary Source

Heating and Hot Water System(s)

A heating/hot water, ventilation, and air conditioning (HVAC) systems analysis considers the potential for emissions from the HVAC system(s) of a development(s) to significantly impact land uses in the area. Based on the *CEQR Technical Manual* guidance, a preliminary screening assessment should be conducted as a first step to predict whether the potential impacts of the heat and hot water system(s) boiler emissions can be significant. This screening analysis determines the threshold of a development size below which the action would not have a significant impact.

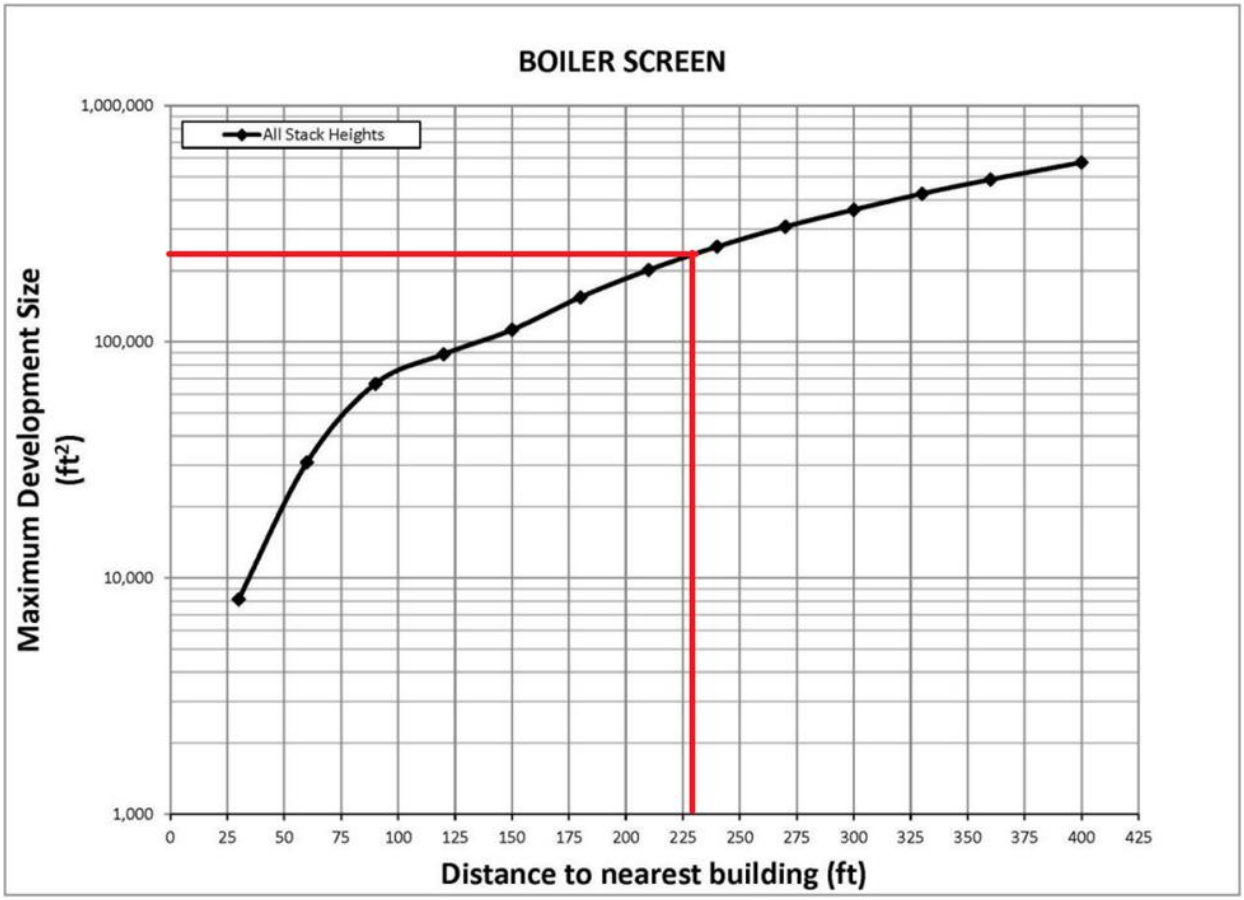
Screening Assessment

The potential for the heat and hot water system(s) to have a significant adverse impact on nearby receptors depends on the type of fuel that would be used by the HVAC system, the height of the stack venting the emissions, the distance to the nearest building of similar or greater height, and the building's use and the square footage of the development that would be served by the system, both of which effect the amount of fossil fuel consumed. The *CEQR Technical Manual* screening assessment is based on these factors. In addition, the CEQR screening procedure is applicable to buildings that are not less than 30 feet from the nearest building of similar or greater height. A detailed analysis is required if the screening assessment failed.

For the purpose of the screening analysis, it was assumed that natural gas would be the type of fuel used in the Proposed Project's HVAC equipment. As such, the CEQR nomograph depicted on Figure 17-3 of the *CEQR Technical Manual Appendices* was used for the screening assessment. The nomograph depict the

size of the development versus distance below which the potential impact can occur and provides a conservative estimate of the threshold distance. Based on the methodology above, the Development Site was analyzed as a 135-foot-tall commercial or other non-residential building, containing 217,551 gsf. The 217,551 gsf corresponds to the 283,433 gsf of the Reasonable Worst Case Development Scenario (RWCDS), excluding the parking garage and mechanical space (65,882 gsf). **Figure I-1** below, which uses Figure 17-3 of the *CEQR Technical Manual Appendices,* shows the proposed building minimum distance screening analysis nomograph. As shown in the screening analysis using the nomograph provided in the *CEQR Technical Manual*, the Proposed Project (excluding the parking garage and mechanical space) intersects the curve for natural gas at a distance of 230 feet (see **Figure I-1**). The nearest building 135 feet or taller within 230 feet of the Development Site is the 250-foot-tall William Vale Hotel. Therefore, a detailed analysis is required for the William Vale Hotel.

Figure I-1: Development Site on Existing Land Uses – HVAC Screen



HVAC Detailed Analysis

A detailed stationary source analysis was conducted to evaluate the potential impacts associated with emissions from the Proposed Project's boiler(s) stack(s). In addition, the detailed analysis also accounts for pollutants emitted by the industrial source(s) introduced by the project (a cumul. This section, the HVAC Detailed Analysis, presents the HVAC emission profile and dispersion results of pollutant applicable to HVAC emission sources. In addition, the Industrial Source subsection describes the industrial source(s)

introduced by the Proposed Project (i.e., the Required Industrial Uses pursuant to IBIA regulations) and the cumulative (HVAC plus industrial) dispersion analysis for pollutants applicable to industrial sources.

The detailed HVAC analysis uses the Lakes Environmental MPI executable. Lakes Environmental has adjusted the US EPA AERMOD source code and recompiled the model to parallelize the processing of receptors. The latest MPI executable, which was used in the analysis, modified the EPA's AERMOD latest executable model (version 21112). The AERMOD model incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of both surface and elevated sources, and both simple and complex terrain. The model was run with the regulatory default option for both with and without downwash effects options and the Building Profile Input Program (BPIP) was run with the downwash effect enabled. All analyses were conducted using five consecutive years of meteorological data (2016-2020), obtained from the NYSDEC. Surface data used in the analysis is from LaGuardia Airport, upper air data is from Brookhaven station, New York. The meteorological data provided hour-by-hour wind speeds and directions, stability states, and temperature inversion elevations over the 5-year period. Population in Kings County, obtained from the U.S. Census Bureau (July 2019), was specified to account for the effects of increased surface heating from an urban area on pollutant dispersion under stable atmospheric conditions.

Natural gas was assumed to be the type of fuel used in the Proposed Project's HVAC system(s) and the system(s) were assumed to be equipped with low-NOx burner(s). Based on *CEQR Technical Manual* guidance, the pollutants of concern for natural gas fueled boilers are NO_2 and $PM_{2.5}$. The HVAC equipment energy capacity was calculated based on the RWCDS (excluding the public plaza, parking garage, and mechanical space) and the energy consumption rate obtained from the *CEQR Technical Manual Appendices* corresponding to the non-residential uses in the Proposed Project. The rate of nitrogen oxides (NOx) emissions, which are emitted from natural gas fueled HVAC system equipped with low-NOx burner(s), was calculated based on emission factor obtained from the DCP. Based on the *CEQR Technical Manual* guidance, all fuel was assumed to be consumed during the 100-day (or 2,400 hour) heating season. **Table I-5** shows the HVAC system(s)' energy capacity and NOx emission rates.

Table I-5: HVAC System(s) Short-term and Annual Emission Rates

Site ID	Development Site RWCDS Floor Area (gsf)	Boiler's Energy Intensity (MMBtu); Fuel Used	Pollutant	Short-term Emission Rate (g/s)	Annual Emission Rate (g/s)
Development Site	217,551	5.56; Natural gas, low-NOX burners	NO_2	1.95E-02	5.34E-03
			$PM_{2.5}$	3.99E-03	1.09E-03

The boiler(s) stack diameter and exit temperature were estimated based on values obtained from the New York City Department of Environmental Protection (NYCDEP) "CA Permit" database for the corresponding boiler sizes (i.e., rated heat input or million Btu per hour).[1] The stack exit velocity was calculated based on the fuel dry volume of combustion components per unit of heat content. For conservative analysis purposes, the boiler's stack was assumed to be 3 feet above the roof and initially as close as possible to the receiving building. A stack set back distance was then specified if exceedance of a threshold concentration standard was predicted.

The RWCDS building was modeled as a building that covers the Development Site's entire lot area (with the wall façade located on the outer lot lines) and rises to its maximum building height. Buildings in the surrounding area, including under construction buildings, were accounted for in the downwash effect on

[1] NYCDEP "CA Permit" database obtained from the New York City Department of City Planning, February 2020.

plume dispersion (BPIP). Receptors on the William Vale Hotel, the receiving building, were placed in spaced intervals on all wall façades from the ground floor to the roof-top height. Ground elevation and roof heights of buildings in the area were obtained from the NYC Building Footprint database[2], except newly constructed building roof heights which were obtained from the New York City Department of Building (NYCDOB) online database. In addition, satellite imagery was used to augment and/or verify certain buildings' roof heights (such as buildings that have multiple tiers. Base elevations of receptors and the stack(s) were set to their buildings' base elevations.

For conservative analysis purposes, the 1-hour NO_2 concentration was modeled with the 8th highest concentration (the NAAQS design value) and a Tier 2 (ARM 2) approach using the default minimum and maximum ratios. Twenty-four-hour $PM_{2.5}$ concentrations were predicted with the 1st highest output (the *de minimis* design value). The model was run twice; with building wake effect enabled/disabled. The predicted concentration is the highest concentration of these outcomes. The NO_2 modeled concentrations were added to the background concentrations and the result were evaluated with the NAAQS. In addition, the model accounted for the NO_2 and $PM_{2.5}$ emission of the industrial uses introduced by the Proposed Project (industrial source analysis is discussed in the Industrial Source section below). Dispersion analysis results for pollutants relevant to HVAC sources are shown in **Table I-6**.

Table I-6: NO_2 and $PM_{2.5}$ Dispersion Analysis Results At The William Vale Hotel (Cumulative HVAC and Industrial Sources Emissions)

Pollutant	Modeled Concentration (µg/m³)	Background Concentration (µg/m³)	Evaluated Concentration (µg/m³)	Threshold Concentration (µg/m³)	Threshold Standard
1-hour NO_2	64.2	106.4	171	188	NAAQS
Annual NO_2	0.9	28.7	30	100	NAAQS
24-hour $PM_{2.5}$	6.4	N.A.	6.4	8.15	*de minimis*
Annual $PM_{2.5}$	0.2	N.A.	0.2	0.3	*de minimis*

The concentrations shown in **Table I-6** were predicted pursuant to certain restrictions to ensure that no significant adverse air quality impact(s) would occur. The restrictions placed on the Proposed Actions are specified in the Air Quality E-Designations section.

Industrial Source (Existing on Project)

Per *CEQR Technical Manual* guidance, projects that would result in new uses (particularly schools, hospitals, parks, and residences) within 400 feet of manufacturing processing facilities may result in potentially significant adverse impacts. The existing industrial source analysis first determines if there are any existing manufacturing uses present within the 400-foot study area which contain exhaust stacks, vents, or other emission sources that may have the potential to adversely affect the uses introduced by a project. If warranted, an air dispersion analysis is then conducted for any existing industrial source(s) located in the study area.

The 400-foot study area encompasses all or part of Blocks 2278, 2279, 2282, 2283, 2288, 2289, 2290, 2296, 2297, 2639, and 2670, and includes properties along Bedford Avenue, Berry Street, Wythe Avenue, Kent Avenue, North 10th Street, North, 11th Street, North 12th Street, North 13th Street, and North 14th Street. Land uses in the study area are a mix of residential, commercial, retail, professional office, and industrial uses, and a public park (McCarren Park). Existing manufacturing uses with exhaust stacks, vents,

[2] New York City Department of Information Technology & Telecommunications (DoITT), 2016.

or other emission sources that may have the potential to adversely affect the uses introduced by the project were identified by reviewing the DEP online Clean Air Tracking System (CATS) database, the NYSDEC map application (DECinfo Locator) and through a field survey conducted on December 10th, 2021. The results of the study are as follows:

- There are two expired DEP Processing permits identified at 1 Kent Avenue (Block 2278, Lot 2), which were issued to the Albest Metal Stamping Corp. Permit PA039685 was issued for metal processing and expired on 10/16/2003. Permit PA052988 was also issued for metal processing and expired on 11/15/2016. At the time of the field survey, the Albest Metal Stamping Corp. was in operation at 1 Kent Avenue. There are two stacks located near the southwest corner of the building. These stacks are located outside the 400-foot study area, and no emissions or odors were observed from these stacks at the time of the field survey. A Freedom of Information Law (FOIL) request was submitted to the DEP on 12/9/2021 for information regarding the two expired permits for this facility. Permit PA039685 is for grinding of metal, where particulates (the only pollutant) are collected by high efficiency (99 percent control efficiency) filter, and the stack is located 410 feet from the Development Site. Permit PA052988 is for spot welding machines and soldering stations, where the stack is located 435 feet from the Development Site. As the emission points are located outside the study area, the facility is screened out and no analysis is required.

- There is one current Processing permit identified at 111 North 12th Street (Block 2283, Lot 1). This permit (PR011918) was issued to the William Vale Hotel for and engine/generator, and expires on 6/26/2024. A FOIL request was submitted to the DEP on 12/9/2021 for information regarding this permit. According to the permit information provided by the DEP, this permit is for an emergency generator. Emergency generators are exempt, and therefore, no analysis of this facility is required.

- There is one Processing permit identified at 94 North 13th Street (Block 2283, Lot 1). This permit was issued to the Star Poly Bag Manufacturing Co. for industrial miscellaneous uses, and expired on 9/22/2016. The Star Poly Bag Manufacturing Co. no longer operates at this location. Block 2283, Lot 1 has since been re-developed as a hotel (the William Vale Hotel). The Star Poly Bag Manufacturing Co. moved to 200 Liberty Avenue in Brooklyn.

- There are three DEP Processing permits found on file for the property located at 118 North 11th Street (Block 2296, Lot 7501). Permit PB468003 was issued to Mary Kuzma Finishing, Inc. for an industrial spray booth, and expired on 11/5/2016. Mary Kuzma Finishing, Inc. no longer operates at this location, having moved to 46-08 37th Avenue, Queens. Permits PA045490 and PB016506 were issued to Inner Gaze Furniture Design for industrial spray booths, and both permits expired on 7/13/2015. Inner Gaze Furniture Design moved to 148 Hinsdale Street, Brooklyn, and no longer operates at 118 North 11th Street. The building at 118 North 11th Street was vacant and undergoing renovation for continued commercial and office uses at the time of the field survey.

No potential industrial toxics air emission source, located in the study area, was identified in the NYSDEC database and/or during the field survey. As such, a detailed analysis is not warranted.

Major and Large Sources

Per the *CEQR Technical Manual*, projects that would introduce new uses near major sources, large

sources, or odor producing facilities may result in potentially significant adverse air quality impacts. The major and large source study area considers major sources, large sources, and odor producing facilities within 1,000 feet of the Proposed Project. Major emission sources are identified as those sources located at NYSDEP designated Title V facilities; large emission sources are identified as sources located at facilities which require an Air State Facility permit. Solid waste or medical waste incinerators, asphalt and concrete plants, power generating plants, large boilers of large public facilities, and large industrial facilities are typical types of sources requiring these permits. Odor producing facilities are operations that have the potential to cause discomfort, such as: solid waste management facilities, water pollution control plants (i.e., sewage treatment plants), and incinerators.

No existing large combustion source(s), such as power plants, cogeneration facilities, etc., located within 1,000 feet of the Proposed Project, was identified[3], and no odor producing facility was identified within 1,000 feet of the Proposed Project. As such, a detailed analysis is not warranted.

Industrial Source (Project on Existing)

Toxic pollutant emissions from the types of light industrial/manufacturing uses being contemplated for the Proposed Project are typically released into the atmosphere in small quantities. However, the potential impacts of these emissions, when compared to stringent allowable guideline values, could be potentially significant. Two factors are critical in estimating the potential impacts of the Proposed Project's toxic pollutant emissions – the quantities of pollutant emitted and the toxicities of the pollutants. If a pollutant is highly toxic, even small emission rates can cause a potentially significant adverse health impact.

Use Types and Emissions of Potential Industrial Uses

Use Groups 9, 11, and 17 include several types of light industrial/manufacturing uses that would be permissible in the Proposed Project and could be sources of toxic emissions. These include art paintings; jewelry manufacturing; photographic printing; clothing manufacturing; cotton ginning; medical or dental laboratories for research or testing; metal finishing; plating; grinding; polishing; and food products. Some permissible light industrial/manufacturing uses, such as pharmaceuticals and plastic or textile manufacturing, are unlikely to operate in the Proposed Project.

As the actual light industrial/manufacturing uses that would operate in the Proposed Project are unknown at this time, it is not possible to determine actual toxic emission rates. However, many of the permissible light industrial/manufacturing uses would comprise operations similar to those that were analyzed in previously approved applications for the 25 Kent Avenue and 103 North 13th Street development projects. Therefore, emission rates for the types of light industrial/manufacturing uses that would be possible in the Proposed Project were estimated based on actual permits for similar light industrial/manufacturing facilities considered is the previously approved applications. Based on data collected from the New York City Department of Environmental Protection (NYCDEP) for actual air toxic facilities considered in the previously approved applications for projects located at 25 Kent Avenue (CEQR No: 16DCP065K; ULURP Nos: C 160124 ZSK; C 160125 ZSK; N 160126 ZRK), 103 North 13th Street (CEQR No: 18DCP182K, ULURP Nos: N 190083 ZRK; C 190084 ZSK; C 190085 ZSK), and 1 Wythe Avenue (CEQR No: 21DCP075K, ULURP

[3] New York State Department of Environmental Conservation (2021). DECinfo Locator. <https://gisservices.dec.ny.gov/gis/dil/> (Sep. 22, 2021).

Nos: 210272ZSK; N210273ZRK), emission rates from light industrial/manufacturing uses of similar types were identified and utilized in the analysis presented herein.

Selected Light Industrial/Manufacturing Uses

Because neither the number nor the types of light industrial/manufacturing uses that would be located in the Proposed Project are currently known (and these operations could change to accommodate future market demand), the light industrial/manufacturing uses that would likely be accommodated within the Proposed Project were selected based on permissible zoning and similar uses identified in the approved applications for the 25 Kent Avenue, 103 North 13th Street, and 1 Wythe Avenue development projects, including:

- Jewelry manufacturing (including gold precipitation), cleaning, polishing, and plating;
- Digital printing, photocopying, and commercial art and graphic design; and
- Baking bread and cookies/pastries.

To conservatively estimate the potential impacts to air quality from the toxic pollutant emissions from these types of light industrial/manufacturing operations, a reasonable worst-case scenario was developed that conservatively assumed that ten (10) of the following types of light industrial/manufacturing facilities would operate simultaneously within the Proposed Project. This is based on the Proposed Project's design, where one entire floor and a portion of a second would be dedicated to light industrial/manufacturing uses. This also reflects the special requirement that a minimum of 5,000 gsf of contiguous area must be provided if light industrial/manufacturing uses are to be accommodated. Based on the Proposed Project's current design, the area designated for the industrial/manufacturing uses within the Proposed Project is approximately 37,643 gsf.

Pollutants emitted by the manufacturing processing operation could potentially include $PM_{2.5}$, NOx, CO, and 25 noncriteria pollutants with varying toxicities. While particulate emission could be a mixture of PM_{10}/$PM_{2.5}$ combined, the analysis assumed that all particulate emission is $PM_{2.5}$ as a conservative measure. ($PM_{2.5}$ standard (*de minimis* or NAAQS) is significantly more conservative than PM_{10} NAAQS.) **Table I-7** shows the emission rates of criteria pollutants emitted from the manufacturing processing operations.

Table I-7: Criteria Pollutants – Emission Rates From Industrial Sources Introduced By The Project

Facility Type	Pollutant	Emission Rate	
		(lb/hr)	(lb/yr)
Jewelry Cleaning	$PM_{2.5}$	0.001	0.002
Commercial Art & Graphic Design		0.068	26
Gold Precipitation		0.001	0.25
Baking of Cookies		0.011	21.1
Baking of Bread		0.008	15.4
Gold Precipitation	NOx	0.019	372
Baking of Cookies		0.07	134.4
Baking of Bread		0.046	88.3
Baking of Cookies	CO	0.001	1.92
Baking of Bread		0.001	1.90

Table I-8 below shows the emission rates of noncriteria pollutants emitted from the manufacturing processing operations.

Table I-8: Noncriteria Pollutants – Emission Rates From Industrial Sources Introduced By The Project

Facility Type	Pollutant	CAS No.	Emission Rate	
			(lb/hr)	(lb/yr)
Commercial Art & Woodworking	Isopropyl Alcohol	00067-63-0	2.48	446
	Acetone	00067-64-1	4.5	810
	Methyl Chloroform	00071-55-6	4.8	864
	Butyl Acetate	00123-86-4	1.8	324
Jewelry Manufacturing	Zinc Chloride	07646-85-7	0.001	2
	Lead Oxide	07439-92-1	0.001	2
Jewelry Plating	Sodium Cyanide	00143-33-9	0.001	2
	Copper Cyanide	00544-92-3	0.001	2
Jewelry Cleaning	Sodium Cyanide	00143-33-9	0.001	2
	Hydrogen Cyanide	00074-90-8	0.002	0.5
	Ammonia	07664-41-7	0.001	0.002
Printing	Toluene	00108-88-3	0.444	888
	Xylene Mixt	01330-20-7	0.06	110
	Butoxyethanol, 2-	00111-76-2	0.07	147
Printing	VM&P Naphtha	08032-32-4	0.004	7.97
	Butoxyethanol, 2-	00111-76-2	0.042	84.04
	Glycerin	00056-81-5	0.011	22.41
	Aluminum	07429-90-5	0.003	34
	Iron Oxide	01309-37-1	0.002	25.5
	Copper	07440-50-8	0.001	3.6
	Zinc	07440-66-6	0.001	0.27
Commercial Art & Graphic Design	Butoxyethanol, 2-	00111-76-2	0.231	480
	Isopropyl Alcohol	00067-63-0	0.032	668
	Ethyl Acetate	00141-78-6	0.05	104
	Toluene	00108-88-3	0.444	888
	Acetone	00067-64-1	0.034	71
	Dibutyl Phthalate	00084-74-2	0.02	62
	Butyl Acetate	00123-86-4	0.3	624
	Ethyl Acetate	00141-78-6	0.05	104
Gold Precipitation	Sodium Cyanide	00143-33-9	0.001	2
	Lead Oxide	01309-60-0	0.09	18
	Nitric Acid	07697-37-2	0.033	64.3
	Hydrogen Chloride	07647-01-0	0.002	2.25
Baking of Cookies	Ethanol	00064-17-5	3.75	885
Baking of Bread	Ethanol	00064-17-5	3.75	885

Industrial Source Dispersion Analysis

AERMOD version 21112 was used to predict concentration at the William Vale Hotel. (The AERMOD modeling application and model setup are discussed in the HVAC analysis.) Six stack locations, set back 10 feet from the Development Site perimeter and at least 100 feet from the western lot line facing Wythe Avenue, were modeled to predict the maximum concentrations. The *CEQR Technical Manual* default stack parameters were specified for the industrial source stack(s). Each industrial source stack was located next to an HVAC stack and 3 feet above the rooftop (138 feet above grade). The default stack parameters were specified for the industrial source stack, based on the *CEQR Technical Manual*. Each industrial source stack was grouped with the HVAC stack located next to it to predict the cumulative concentration.

Receptors were placed at all sensitive locations within 400 feet of the Development Site. This included all buildings from ground floor to rooftop heights, sidewalks, and open spaces. Building roof heights in the area were obtained from the NYC Building Footprint database[4], except newly constructed building roof heights which were obtained from the New York City Department of Building (DOB) online database. In addition, satellite imagery was used to augment and/or verify certain buildings' roof heights, such as buildings that have multiple tiers.

The U.S. Geological Service (USGS) National Elevation Dataset (NED) 1/3 arc-second resolution (GeoTIFF dataset), the terrain data set recommended by the EPA for use in the United States for regulatory purposes, was used to process buildings' base elevations. Base elevations of receptors at building sensitive locations and stack(s) were set to their buildings' base elevations. Base elevation of receptor at sidewalks and open spaces were processed with AERMODF terrain processor.

CO concentration was predicted with a generic emission rate of 1 gram per second. The 1-hour NO_2 concentration was modeled with the 8th highest concentration (the NAAQS design value) and a Tier 2 (ARM 2) approach, using the default minimum and maximum ratios. The 24-hour $PM_{2.5}$ concentration was predicted with the 1st highest output (the *de minimis* design value) and average emission during a 12-hour day which were based on the previously approved applications for IBIA development projects in the area. The model was run twice (with building wake effect enabled/disabled) and the predicted concentration is the highest concentration of these. **Table I-9** shows the criteria pollutants dispersion analysis results. As shown in **Table I-9**, the $PM_{2.5}$ predicted concentrations do not exceed the *de minimis* and the NO_2 and CO concentration are within the NAAQS.

Table I-9: Criteria Pollutants Dispersion Analysis Results – Cumulative HVAC and Industrial Source Concentrations

Criteria Pollutant	Increment (Modeled) Concentration	Background Concentration	Evaluated Concentration	Threshold Standard	Threshold Criteria
NO_2 1-Hour (µg/m^3)	64.2	106.4	171	NAAQS	188
NO_2 Annual (µg/m^3)	1.5	28.7	30	NAAQS	100
$PM_{2.5}$ 24-Hour (µg/m^3)	6.4	18.7	6.4	*de minimis*	8.15
$PM_{2.5}$ Annual (µg/m^3)	0.12	7.6	0.12	*de minimis*	0.3
CO 1-Hour (ppm)	0.001	1.87	1.87	NAAQS	35
CO 8-Hour (ppm)	0.001	1.30	1.30	NAAQS	9

[4] New York City Department of Information Technology & Telecommunications (DoITT), 2016.

Table I-10 shows the noncriteria pollutants dispersion analysis results, where pollutant concentrations were predicted using a generic emission rate of 1 gram per second. As shown in **Table I-10**, the noncriteria pollutants concentrations are within the SGC/AGC standard.

Table I-10: Noncriteria Pollutants Dispersion Analysis Results – Cumulative HVAC and Industrial Source Concentrations

Pollutant	CAS No.	1-Hour	SGC	Annual	AGC
		($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)
Glycerin	00056-81-5	5.2	No CAS	0.04	No CAS
Ethanol	00064-17-5	3568.9	---	2.8	45000.0
Isopropyl Alcohol	00067-63-0	1195.3	98000.0	1.8	7000.0
Acetone	00067-64-1	2157.5	180000.0	1.4	30000.0
Butoxyethanol, 2-	00111-76-2	163.2	4700.0	1.1	1600.0
Butyl Acetate	00123-86-4	999.3	71300.0	1.5	565.0
Ethyl Acetate	00141-78-6	47.6	---	0.3	3400.0
Iron Oxide	01309-37-1	1.0	---	0.04	12.0
Lead Oxide	01309-60-0	42.8	---	0.028	0.044
Aluminum	07429-90-5	1.4	---	0.05	2.4
Copper	07440-50-8	0.5	100.0	0.006	0.48
Zinc Chloride	07646-85-7	0.5	200.0	0.003	2.4
Ammonia	07664-41-7	0.5	2400.0	0.000003	500.0
Nitric Acid	07697-37-2	15.7	86.0	0.10	12.3
VM&P Naphtha	08032-32-4	1.9	---	0.01	900.0
Methyl Chloroform **	00071-55-6	2284.1	9000.0	1.4	5000.0
Hydrogen Cyanide **	00074-90-8	1.0	340.0	0.001	0.8
Dibutyl Phthalate **	00084-74-2	9.5	---	0.10	12.0
Toluene **	00108-88-3	422.6	37000.0	2.8	5000.0
Sodium Cyanide **	00143-33-9	1.4	380.0	0.01	3.5
Copper Cyanide **	00544-92-3	0.5	380.0	0.003	3.5
Xylene Mixt **	01330-20-7	28.6	22000.0	0.2	100.0
Lead Oxide **	07439-92-1	0.5	---	0.003	0.038
Zinc **	07440-66-6	0.5	---	0.0004	45.0
Hydrogen Chloride **	07647-01-0	1.0	2100.0	0.004	20.0

Note: ** Indicates HAP.

V. E DESIGNATION

Based on the results of these analyses, the following (E) Designation would be required as part of the Proposed Actions:

Heating/Hot Water, Ventilation, and Air Conditioning (HVAC):

Block 2283, Lots 25, 28, 31, 33, 35, 38, 41, 43 (Development Site): Any new commercial or industrial development on the above-referenced property must exclusively use natural gas as the type of fuel for

heating, ventilating, air conditioning (HVAC), and hot water system(s) and must be fitted with low NOx (30 ppm) burners, ensure that the stack is located at the building's highest level or at least 138 feet above grade, and that the stack is located at least 100 feet from the western lot line of Lot 25 or 43 facing Wythe Avenue to avoid any potential significant adverse air quality impacts.

Industrial Uses:

Block 2283, Lots 25, 28, 31, 33, 35, 38, 41, 43 (Development Site): To preclude the potential for significant adverse impact(s) from the industrial source emissions from the light industrial/manufacturing uses, emission stack(s) must be located at the building's highest level or at least 138 feet above grade, and that the stack is located at least 100 feet from the western lot line of Lot 25 or 43 facing Wythe Avenue.

With adherence to the applicable (E) designations described above, no significant adverse impacts to air quality are anticipated as a result of the Proposed Actions and operation of the subsequent Proposed Project. As such, under the selected locations of the Proposed Project's HVAC and hot water system exhaust stack(s) on the rooftop, the potential impacts of emissions from the would not be significant. In addition, the potential impacts of the internal light industrial/manufacturing uses located within the Proposed Project would not be significant with the exhaust stack(s) located at the designated rooftop location. Therefore, the Proposed Actions would not result in any potentially significant adverse stationary air quality impacts, and further assessment is not warranted.

ATTACHMENT J
NOISE

I. INTRODUCTION

This attachment assesses the potential for the proposed action to result in significant adverse noise impacts. As described in **Attachment A, "Project Description,"** Mihata Corporation (the "Applicant") is requesting a zoning map amendment, zoning text amendment, and special permits to modify the maximum permitted floor area, underlying plaza regulations, and the off-street parking and loading requirements (pursuant to Zoning Resolution [ZR] § 74-963, ZR § 74-964(b), and ZR § 74-964(c)) (the "Proposed Actions"). The Proposed Actions would facilitate development of a new approximately 283,433-gross square feet (-gsf), 10-story development (the "Proposed Project") with a built FAR of 4.8 on Brooklyn Block 2283, Lots 25, 28, 31, 33, 35, 38, 41, and 43 (the "Development Site"). The Proposed Project would contain 184,561 gsf of commercial space and 32,990 gsf of light industrial space, the latter providing a "Required Industrial Use" pursuant to Industrial Business Incentive Area (IBIA) regulations. The Proposed Project is expected to be complete and operational by 2025.

The noise analysis for the proposed action was carried out in compliance with *CEQR Technical Manual* guidance. According to the *CEQR Technical Manual*, the goal of a CEQR noise assessment is to determine both (i) a proposed project's potential effects on sensitive noise receptors, including the effects on the level of noise inside residential, commercial, and institutional facilities (if applicable), and at open spaces; and (ii) the effects of ambient noise levels on new sensitive uses introduced by a proposed project. If significant adverse impacts are identified, CEQR requires such impacts to be mitigated or avoided to the greatest extent practicable.

As described in **Attachment B, "Supplemental Screening,"** the Proposed Actions would introduce new sensitive receptors within the Development Site and would change traffic patterns/volumes in the general vicinity of this area. As such, an analysis was conducted consisting of:

- A screening analysis to determine whether traffic generated by the Proposed Actions would have the potential to result in significant adverse noise impacts on existing or proposed receptors;

- An analysis to determine the level of building attenuation necessary to ensure that interior noise levels for the Proposed Project satisfy applicable interior noise criteria.

Based on a field survey of land uses in the area, it was determined that no stationary noise sources contribute significantly to noise levels at the Development Site, and, therefore, a stationary source noise analysis was not warranted. Furthermore, this chapter does not include an analysis of mechanical equipment because such mechanical equipment would be designed to meet all applicable noise regulations and, therefore, would not result in adverse noise impacts.

II. NOISE FUNDAMENTALS

Noise is considered unwanted sound. Sound is a fluctuation in air pressure. Sound pressure levels are measured in units called "decibels" (dB). The particular character of the sound that we hear (a whistle

compared with a French horn, for example) is determined by the speed, or "frequency," at which the air pressure fluctuates or "oscillates." Frequency defines the oscillation of sound pressure in terms of cycles per second (cps). One cycle per second is known as 1 Hertz (Hz). People can hear sound over a relatively limited range of frequencies, generally between 20 Hz and 20,000 Hz. Furthermore, the human ear does not perceive all frequencies equally well. High frequencies (e.g., a whistle) are more easily discernible and therefore more intrusive than many of the lower frequencies (e.g., the lower notes on the French horn).

A-Weighted Sound Level (dBA)

In order to establish a uniform noise measurement that simulates people's perception of loudness and annoyance, the decibel measurement is weighted to account for those frequencies most audible to the human hearing range. This is known as the A-weighted sound level, or "dBA," and it is the descriptor of noise levels most often used for community noise. As shown in **Table J-1**, the threshold of human hearing is defined as 0 dBA; very quiet conditions (as in a rural area at night, for example) are approximately 30-40 dBA; levels between 50 dBA and 70 dBA define the range of noise levels generated by normal daily activity; levels above 70 dBA would be considered noisy, and then loud, intrusive, and deafening, as the scale approaches 120 dBA.

Table J-1: Common Noise Levels

Sound Source	(dBA)
Air Raid Siren at 50 feet	120
Maximum Levels at Rock Concerts (Rear Seats)	110
On Platform by Passing Subway Train	100
On Sidewalk by Passing Heavy Truck or Bus	90
On Sidewalk by Typical Highway	80
On Sidewalk by Passing Automobiles with Mufflers	70
Typical Urban Area	60-70
Typical Suburban Area	50-60
Quiet Suburban Area at Night	40-50
Typical Rural Area at Night	30-40
Soft Whisper at 5 meters	30
Isolated Broadcast Studio	20
Audiometric (Hearing Testing) Booth	10
Threshold of Hearing	0

Note: A 10 dBA increase appears to double the loudness, and a 10 dBA decrease appears to halve the apparent loudness.
Source: *CEQR Technical Manual*/Cowan, James P. Handbook of Environmental Acoustics. Van Nostrand Reinhold, New York, 1994. Egan, M. David, Architectural Acoustics. McGraw-Hill Book Company, 1988.

Community Response to Changes in Noise Levels

Table J-2 shows the average ability of an individual to perceive changes in noise. It is important to note that the dBA scale is logarithmic, meaning that each increase of 10 dBA describes a doubling of perceived loudness. Thus, the noise on a platform with a passing subway train, at 100 dBA, is perceived as twice as loud as passing heavy trucks at 90 dBA. For most people to perceive an increase in noise, it must be at least 3 dBA. At 5 dBA, the change will be readily noticeable. These guidelines permit direct estimation of an individual's probable perception of changes in noise levels.

Table J-2: Average Ability to Perceive Changes in Noise Levels

Change (dBA)	Human Perception of Sound
2-3	Barely perceptible
5	Readily noticeable
10	A doubling or halving of the loudness of sound
20	A dramatic change
40	Difference between a faintly audible sound and a very loud sound

Source: Bolt Beranek and Neuman, Inc., Fundamentals and Abatement of Highway Traffic Noise, Report No. PB-222-703. Prepared for Federal Highway Administration, June 1973.

Noise Descriptors Used in Impact Assessment

Because the sound pressure level unit, dBA, describes a noise level at just one moment, and very few noises are constant, other ways of describing noise over extended periods have been developed. One way of describing fluctuating sound is to describe the fluctuating noise heard over a specific time period as if it had been a steady, unchanging sound. For this condition, a descriptor called the "equivalent sound level", L_{eq}, can be computed. L_{eq} is the constant sound level that, in a given situation and time period (e.g., 1 hour, denoted by $L_{eq(1)}$) conveys the same sound-energy as the actual time-varying sound.

Statistical sound level descriptors such as L_1, L_{10}, L_{50}, L_{90}, and L_x, are sometimes used to indicate noise levels that are exceeded 1, 10, 50, 90 and "x" percent of the time, respectively. Discrete event peak levels are given as L_1 levels. L_{eq} is used in the prediction of future noise levels, by adding the contributions from new sources of noise (i.e., increases in traffic volumes) to the existing levels and in relating annoyance to increases in noise levels.

The relationship between L_{eq} and levels of exceedance is worth noting. Because L_{eq} is defined in energy rather than straight numerical terms, it is not simply related to the levels of exceedance. If the noise fluctuates very little, L_{eq} will approximate L_{50} or the median level. If the noise fluctuates broadly, the L_{eq} will be approximately equal to the L_{10} value. If extreme fluctuations are present, the L_{eq} will exceed L_{90} or the background level by 10 or more decibels. Thus, the relationship between L_{eq} and the levels of exceedance will depend on the character of the noise. In community noise measurements, it has been observed that the L_{eq} is generally between L_{10} and L_{50}. The relationship between L_{eq} and exceedance levels has been used in this analysis to characterize the noise sources and to determine the nature and extent of their impact at each monitoring location.

For the purposes of this analysis, the maximum 1-hour equivalent sound level (L_{eq}) has been selected as the noise descriptor to be used in the noise impact evaluation. L_{eq} is the noise descriptor used in the *CEQR Technical Manual* for noise impact evaluation, and is used to provide an indication of highest expected sound levels. L_{10} is the noise descriptor used in the *CEQR Technical Manual* for building attenuation.

Applicable Noise Codes and Impact Criteria

CEQR Technical Manual Noise Standards

The NYC Department of Environmental Protection (DEP) has set external noise exposure standards based on L_{10} noise levels. These standards are shown in **Table J-3**. Noise exposure is classified into four categories: acceptable, marginally acceptable, marginally unacceptable, and clearly unacceptable.
The *CEQR Technical Manual* defines attenuation requirements for buildings based on exterior noise level. Recommended noise attenuation values for building facades are designed to maintain interior noise levels

of 45 dBA or lower for residential and community facility uses and 50 dBA or lower for commercial uses, and are determined based on exterior L_{10} noise levels. The standards shown are based on maintaining an interior noise level for the worst-case hour L_{10} of 45 dBA or lower. (Attenuation requirements are shown in **Table J-4** on the following page.)

Table J-3: Noise Exposure Guidelines for Use in City Environmental Impact Review

Receptor Type	Time Period	Acceptable General External Exposure	Airport[3] Exposure	Marginally Acceptable General External Exposure	Airport[3] Exposure	Marginally Unacceptable General External Exposure	Airport[3] Exposure	Clearly Unacceptable General External Exposure	Airport[3] Exposure
1. Outdoor area requiring serenity and quiet[2]		$L_{10} \leq 55$ dBA	---------- DNL ≤ 60 dBA ----------		---------- 60 < DNL ≤ 65 dBA ----------		(1) 65 < DNL ≤ 75 dBA		---------- 75 dBA < DNL ----------
2. Hospital, Nursing Home		$L_{10} \leq 55$ dBA		55 < $L_{10} \leq 65$ dBA		65 < $L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	
3. Residence, residential hotel or motel	7 AM to 10 PM	$L_{10} \leq 65$ dBA		65 < $L_{10} \leq 70$ dBA		70 < $L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	
	10 PM to 7 AM	$L_{10} \leq 55$ dBA		55 < $L_{10} \leq 70$ dBA		70 < $L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	
4. School, museum, library, court, house of worship, transient hotel or motel, public meeting room, auditorium, out-patient public health facility		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)	
5. Commercial or office		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)	
6. Industrial, public areas only[4]	Note 4	Note 4		Note 4		Note 4		Note 4	

Notes: In addition, any new activity shall comply with the Impact Thresholds detailed in Section 410 of Chapter 19, "Noise," of the 2021 *CEQR Technical Manual*;

1 Measurements and projections of noise exposures are to be made at appropriate heights above site boundaries as given by American National Standards Institute (ANSI) Standards; all values are for the worst hour in the time period.

2 Tracts of land where serenity and quiet are extraordinarily important and serve an important public need and where the preservation of these qualities is essential for the area to serve its intended purpose. Such areas could include amphitheaters, particular parks or portions of parks or open spaces dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet. Examples are grounds for ambulatory hospital patients and patients and residents of sanitariums and old-age homes.

3 One may use the FAA-approved L_{dn} contours supplied by the Port Authority, or the noise contours may be computed from the federally approved INM Computer Model using flight data supplied by the Port Authority of New York and New Jersey.

4 External Noise Exposure standards for industrial areas of sounds produced by industrial operations other than operating motor vehicles or other transportation facilities are spelled out in the New York City Zoning Resolution, Sections 42-20 and 42-21. The referenced standards apply to M1, M2, and M3 manufacturing districts and to adjoining residence districts (performance standards are octave band standards).

Source: New York City Department of Environmental Protection (adopted policy 1983).

Table J-4: Required Attenuation Values to Achieve Acceptable Interior Noise Levels

	Marginally Unacceptable				Clearly Unacceptable
Vehicular Traffic	$70<L_{10}\leq73$	$73<L_{10}\leq76$	$76<L_{10}\leq78$	$78<L_{10}\leq80$	$80<L_{10}$
Aircraft[A]	65<DNL ≤68	68<DNL ≤71	71<DNL ≤73	73<DNL ≤75	75< DNL
Train	$65<L_{dn}\leq68$	$68<L_{dn}\leq71$	$71<L_{dn}\leq73$	$73<L_{dn}\leq85$	$75< L_{dn}$
Attenuation[B]	(I) 28 dB(A)	(II) 31 dB(A)	(III) 33 dB(A)	(IV) 35 dB(A)	See note [C]

Note: [A] DNL descriptor based on average values of L_{dn} over a year period

[B] The above composite window-wall attenuation values are for residential dwellings. Commercial office spaces and meeting rooms would be 5 dB(A) less in each category. All the above categories require a closed window situation and hence an alternate means of ventilation.

[C] The required attenuation value is the difference between L_{build} and $L_{interior,}$ using the appropriate noise descriptor where:

L_{build} is the projected noise level under the build condition rounded up to a whole number

$L_{interior}$ is the designed interior noise level (45 dBA for vehicular noise, 40 dBA for aircraft and train noise)

Source: New York City Department of Environmental Protection / 2021 *CEQR Technical Manual*

III. NOISE PREDICTION METHODOLOGY

Future noise levels resulting from traffic were calculated with a proportional modeling technique used as a screening tool to estimate changes in noise levels. The proportional modeling technique is an analysis methodology recommended for analysis purposes in the *CEQR Technical Manual*. The noise analysis examined the weekday AM, midday, and PM peak hours.

Proportional Modeling

Proportional modeling was used to determine No-Action and With-Action noise levels at the receptor locations adjacent to the Development Site, as discussed in more detail below. Proportional modeling is one of the techniques recommended in the *CEQR Technical Manual* for mobile source analysis.

Using this technique, the prediction of future noise levels (where traffic is the dominant noise source) is based on a calculation using measured existing noise levels and predicted changes in traffic volumes to determine No-Action and With-Action noise levels. Vehicular traffic volumes (counted during the noise recording), are converted into PCE values, for which one medium-duty truck (cargo vehicles with two axles and six tires) is assumed to generate the noise equivalent of thirteen cars, one heavy-duty truck (cargo vehicles with three or more axles) is assumed to generate the noise equivalent of 47 cars, and one bus (vehicles having two or three axles and designed to carry more than nine passengers) is assumed to generate the noise equivalent of eighteen cars. Future noise levels are calculated using the following equation:

FNA NL =10 log (NA PCE/E PCE) + E NL

where:

FNA NL = Future No-Action Noise Level
NA PCE = No-Action PCEs
E PCE = Existing PCEs
E NL = Existing Noise Level

Sound levels are measured in decibels and therefore increase logarithmically with sound source strength. In this case, the sound source is traffic volumes measured in PCEs. For example, assume that traffic is the dominant noise source at a particular location. If the existing traffic volume on a street is 100 PCEs and if the future traffic volumes were increased by 50 PCEs to a total of 150 PCEs, the noise level would increase by 1.8 dBA. Similarly, if the future traffic were increased by 100 PCEs, or doubled to a total of 200 PCEs, the noise level would increase by 3.0 dBA.

For this analysis, during the noise recording, vehicles were counted and classified. To calculate the 2025 No-Action PCE values at the Development Site, an annual background growth rate of 0.50 percent for years one through four, plus the estimated incremental travel demand from new development within the vicinity of the Project Area (refer to **Attachment C, "Land Use, Zoning, and Public Policy"**) was applied to the PCE noise values based on counted vehicles.[1] In order to obtain the necessary With-Action PCE values to calculate the With-Action noise levels, a trip generation was prepared based on the projected amount of incremental floor area generated by the 2025 With-Action development, utilizing existing modal split data for the census tract within which the Development Site is located.[2] In order to obtain the necessary With-Action PCE values to calculate the With-Action noise levels, the 2025 With-Action traffic increment assignments presented in **Attachment H, "Transportation,"** were converted into PCE values and added to the calculated No-Action PCE values for the weekday AM, MD, and PM peak hours.

IV. EXISTING CODITIONS

As detailed in **Attachment A, "Project Description,"** the Applicant-owned Development Site at 20 Berry Street (Brooklyn Block 2283, Lots 25, 28, 31, 33, 35, 38, 41 and 43) is approximately 40,000 sf with approximately 200 feet of frontage along each bounding street – Berry Street to the east, North 13th Street to the north, North 12th Street to the south – and a 200-foot lot line to the west which is a contiguous, shared wall with the adjacent building (refer to **Figure J-1)**. The Development Site is currently occupied by eight single story warehouse/light industrial buildings built fully to the lot lines. Access to the buildings is provided by eight loading berths and their associated curb cuts (three on North 13th Street, three on Berry Street and two on North 12th Street), and there is no accessory parking at the site.

In proximity to the site, North 13th Street is a 60-foot narrow street operating two-way with one westbound and one eastbound travel lane and parallel parking lanes along both curbs. North 12th Street is a 60-foot-wide narrow street operating with one westbound travel lane, parallel-parking lanes along both curbs, and a conventional bike lane striped between the travel lane and the northern curbside parking lane. Berry Street is a 60-foot-wide narrow street operating with one northbound travel lane, parallel-parking lanes along both curbs, and a conventional bike lane striped between the travel lane and the western curbside parking lane.

Selection of Noise Receptor Locations

As discussed above, local traffic is the dominant source of noise near the Development Site. The noise receptor locations were selected to be along each frontage of the Development Site. The

[1] The background growth rate is based on information provided in Table 16-4 of the 2021 *CEQR Technical Manual.*

[2] Based on AASHTO CTPP Peak Hour Reverse Journey to Work 5-Year data for Kings county census tracts 361, 363, 902, 906 and 924.

assumption was made that all windows on all frontages of the buildings would be operable. These locations are shown in **Figure J-1** and described below:

- Receptor Location 1 – Future southern frontage of Applicant-owned Development Site (North 12th Street); approximately 100 feet west of Berry Street;
- Receptor Location 2 – Future eastern frontage of Applicant-owned Development Site (Berry Street); approximately 100 feet north of North 12th Street; and
- Receptor Location 3 – Future northern frontage of Applicant-owned Development Site (North 13th Street); approximately 100 feet west of Berry Street.

At all receptor locations, 20-minute spot noise measurements were performed during the weekday AM (8:00 – 9:00 AM), midday (12:00 – 1:00 PM), and PM (5:00 – 6:00 PM) peak periods. The noise monitoring occurred on Wednesday, June 16, 2021. The weather was clear and in the 70s°F, with a wind speed average of 13 miles per hour. Vehicle classification counts were also conducted during these 20-minute measurements.

Equipment Used During Noise Monitoring

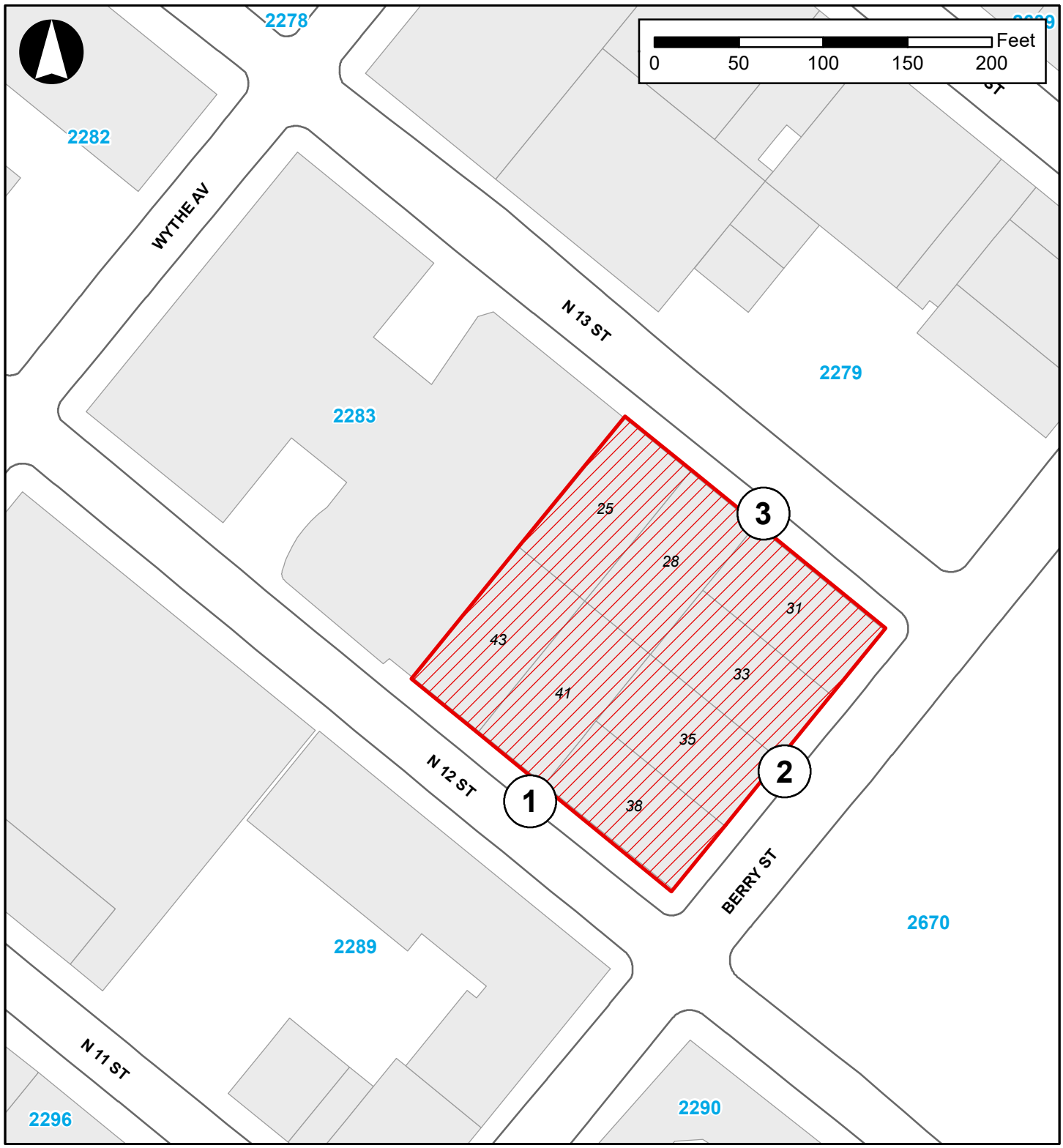
Measurements were performed using Brüel & Kjær Sound Level Meters (SLM) Type 2250 and 2260, Brüel & Kjær ½-inch microphones Type 4189, and Brüel & Kjær Sound Level Calibrators Type 4231. The Brüel & Kjær SLMs are Type 1 instruments according to ANSI Standard S1.4- 1983 (R2006). The SLMs had a laboratory calibration date within one year of the time of use. For the three receptor locations, the microphones were mounted at a height of approximately five feet above the ground surface on a tripod and approximately six feet or more away from any large sound-reflecting surface to avoid major interference with sound propagation. The SLMs were calibrated before and after readings with a Brüel & Kjær Type 4231 Sound Level Calibrator using the appropriate adaptor. Measurements at each location were made on the A-scale (dBA). The data were digitally recorded by the SLMs and displayed at the end of the measurement period in units of dBA. Measured quantities included the L_{eq}, L_1, L_{10}, L_{50}, and L_{90} values, as well as ⅓-octave bands. A windscreen was used during all sound measurements except for calibration. All measurement procedures were based on the guidelines outlined in ANSI Standard S1.13-2005.

Existing Noise Levels at Monitoring Locations

Noise monitoring results for Receptor Locations 1 through 3 are summarized in **Table J-5**. Traffic was the dominant noise source and the values shown reflect the level of vehicular activity on the respective thoroughfares adjacent to the Development Site.

Noise levels are relatively moderate near the Development Site. Specifically, as shown in **Table J-5**, the highest overall estimated noise value (65.9 dBA) was during the weekday AM peak period at Receptor Location 1. Pursuant to *CEQR Technical Manual* guidance, this noise L_{10} value places Receptor Location 1 in the "Marginally Acceptable" CEQR Noise Exposure category. Receptor Locations 2 and 3 fall within the "Acceptable" CEQR Noise Exposure category as the highest existing noise values were estimated to be 61.4 dBA during the weekday PM peak period and 64.5 dBA during the weekday MD peak period, respectively.

Figure J-1
Noise Monitor Locations



Legend

Development Site | Existing Building | 2283 Block | 28 Lot | (1) Noise Monitor Location

Table J-5: Existing Noise Levels (dBA)

Receptor[1]	Measurement Location	Time[2]	L_{Max}	L_{Min}	L_{eq}	L_1	L_{10}[3]	L_{50}	L_{90}	CEQR Noise Exposure Category[4]
1	North 12th Street	AM	91.3	59.1	64.5	71.2	**65.9**	63.4	61.7	Marginally Acceptable
		MD	83.6	57.4	62.8	71.2	64.0	61.1	59.3	
		PM	85.2	57.7	63.3	71.7	64.2	62.4	59.7	
2	Berry Street	AM	79.1	48.4	57.8	66.7	60.8	55.3	52.0	Acceptable
		MD	77.7	47.3	57.0	67.6	59.8	53.2	50.2	
		PM	81.7	48.6	58.6	67.5	**61.4**	56.0	52.6	
3	North 13th Street	AM	87.5	53.3	61.4	71.7	63.0	58.3	55.8	Acceptable
		MD	81.9	50.5	60.6	70.6	**64.5**	56.4	53.3	
		PM	76.6	52.0	60.7	68.2	62.6	59.3	56.9	

Notes: Field measurements were performed by Philip Habib & Associates on Wednesday, June 16, 2021.
[1] Receptor locations shown in **Figure J-1**.
[2] AM = weekday AM peak period; MD = weekday midday peak period; PM = weekday PM peak period.
[3] The highest measured noise level at each receptor is indicated in **bold.**
[4] For consistency purposes, the CEQR noise exposure categories for existing, No-Action, and With-Action conditions are based on the community facility noise exposure guidelines; reflects the worst-case peak hour noise levels.

V. FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION CONDITION)

As discussed in **Attachment A, "Project Description,"** in the future without the Proposed Actions, all structures at the Development Site would remain in their existing condition – one-story warehouse structures, built to the full 1.0 FAR. However, only two of the eight are currently occupied. As such, it is assumed that the six remaining unoccupied buildings would be converted to as-of-right retail uses. Therefore, under No-Action conditions, the Development Site would contain approximately 10,000 gsf of industrial/warehousing space and approximately 30,000 gsf of local retail space. Additionally, as described in Attachment C, "Land Use, Zoning, and Public Policy," there are several No-Build sites within 400 feet of the Development Site: 103 North 13th Street, a seven-story (115-foot-tall), 75,279-gsf commercial and industrial building; and 29 Wythe Avenue, a seven-story (110-foot-tall), 214,915-gsf commercial and industrial building. Each No-Build site is expected to be completed and operational by the 2025 Build Year.

Using the methodology described in Section IV, "Noise Prediction Methodology," future noise levels in the No-Action condition were calculated for the three analysis periods for the 2025 Build Year. **Table J-6** below shows the measured existing noise levels, as well as the No-Action PCE values and the No-Action noise levels at the receptor location.

Comparing future No-Action noise levels with existing noise levels, the increases in L_{eq} noise level would range between 0.03 and 2.86 dBA at the receptor locations. Increases of this magnitude would be barely perceptible,[3] and would not be significant based upon the *CEQR Technical Manual* impact criteria. The projected No-Action L_{10} noise levels at Receptor Locations 1 and 2 would remain in their same respective CEQR Noise Exposure categories as under existing conditions (i.e., "Marginally Acceptable" at Receptor Location 1 and "Acceptable" at Receptor Location 2), whereas Receptor Location 3 would now fall in the "Marginally Acceptable" CEQR Noise Exposure category.

[3] Bolt Beranek and Neuman, Inc., Fundamentals and Abatement of Highway Traffic Noise, Report No. PB-222-703. Prepared for Federal Highway Administration, June 1973 (refer to Table J-2).

Table J-6: Future No-Action Noise Levels and Total PCE Values at Receptor Locations (in dBA)

Receptor	Time	Existing PCEs	No-Action PCEs	Existing L_{eq}	No-Action L_{eq}	Change[1]	No-Action L_{10}[2]	CEQR Noise Exposure Category
1	AM	255	257	64.5	64.5	0.03	**66.0**	Marginally Acceptable
	MD	249	251	62.8	62.8	0.03	64.0	
	PM	168	171	63.3	63.3	0.08	64.3	
2	AM	93	149	57.8	59.8	2.05	**62.8**	Acceptable
	MD	153	183	57.0	57.8	0.78	60.6	
	PM	123	153	58.6	59.5	0.95	62.3	
3	AM	72	139	61.4	64.2	2.86	**65.8**	Marginally Acceptable
	MD	84	113	60.6	61.9	1.29	65.8	
	PM	39	73	60.7	63.4	2.72	65.3	

Notes: All PCE and noise value are shown for a weekday.
[1] No-Action Leq - Existing Leq
[2] The highest L_{10} noise levels at each monitoring location are shown in **bold**.

VI. FUTURE WITH THE PROPOSED ACTIONS (WITH-ACTION CONDITION)

Using the methodology described in Section IV, "Noise Prediction Methodology" future noise levels in the With-Action condition were calculated for the three analysis periods at each of the receptor locations for the 2025 Build Year.

As described in **Attachment A, "Project Description,"** the Proposed Actions would facilitate the construction of a 10-story, 283,433-gsf mixed-use building on the Development Site. As shown in **Table J-7**, after accounting for additional traffic introduced by the Proposed Actions, the maximum projected L_{10} noise level in the With-Action condition would be 66.0 dBA during the AM peak hour at Receptor Location 1, 64.3 dBA during the AM peak hour at Receptor Location 2, and 67.8 dBA during the PM peak hour at Receptor Location 3. As such, Receptor Locations 1 and 3 would remain in the "Marginally Acceptable" CEQR Noise Exposure category, and Receptor Location 2 would remain in the "Acceptable" CEQR Noise Exposure category, as under No-Action conditions.

Table J-7: Future With-Action Noise Levels and Total PCE Values at Receptor Locations (in dBA)

Receptor	Time	With-Action PCEs	No-Action L_{eq}	With-Action L_{eq}	Change[1]	With-Action L_{10}[2]	CEQR Noise Exposure Category
1	AM	260	64.5	64.6	0.05	**66.0**	Marginally Acceptable
	MD	264	62.8	63.0	0.22	64.2	
	PM	181	63.3	63.6	0.25	64.5	
2	AM	208	59.8	61.3	1.45	**64.3**	Acceptable
	MD	223	57.8	58.7	0.86	61.5	
	PM	167	59.5	59.9	0.38	62.7	
3	AM	198	64.2	65.8	1.54	67.4	Marginally Acceptable
	MD	144	61.9	62.9	1.05	66.8	
	PM	129	63.4	65.9	2.47	**67.8**	

Notes: All PCE and noise value are shown for a weekday.
[1] With-Action Leq – No-Action Leq
[2] The highest L_{10} noise levels at each monitoring location are shown in **bold.**

As shown in **Table J-7**, comparing the future With-Action noise levels with No-Action noise levels, increases in noise levels would range at each receptor location. Increases in L_{eq} noise levels at Location 1

would be minimal (between .05 and 0.25 dBA) while increases in L_{eq} noise levels at Locations 2 and 3 would range from 0.38 dBA to 1.45 dBA and from 1.05 dBA to 2.47 dBA, respectively. According to 2021 *CEQR Technical Manual* guidance, increases in L_{eq} of less than 3.0 dBA would be barely perceptible. In addition, the L_{eq} noise levels at all locations would remain below 70 dBA. As such, based on *CEQR Technical Manual* guidance, interior noise levels would remain below the CEQR thresholds of 45 dBA or lower for residential and community facility uses and 50 dBA or lower for commercial office uses. Furthermore, in the future With-Action scenario, the projected noise levels at each of the receptor locations would remain in either the "Acceptable" or the "Marginally Acceptable" CEQR Noise Exposure categories pursuant to the guidance of the *CEQR Technical Manual*. As such, the Proposed Actions are not anticipated to result in significant adverse noise impacts.

VII. CEQR ATTENUATION REQUIREMENTS

As shown earlier in **Table J-3**, the *CEQR Technical Manual* has set noise attenuation requirements for buildings based on L_{10} noise levels. Recommended composite window/wall attenuation values for buildings are designed to maintain interior noise levels of 45 dBA or lower for residential and community facility uses and 50 dBA or lower for commercial uses, and are determined based on L_{10} noise levels.

Any facade that would experience an L_{10} of 70.0 dBA or greater must provide an alternate means of ventilation (AMV) permitting a closed window condition during warm weather. This can be achieved by installing double-glazed windows on a heavy frame for masonry structures or windows consisting of laminated glass, along with AMV such as central air conditioning, through-wall sleeve-fitted air conditioners, packaged terminal air conditioning (PTAC) units, trickle vents integrated into window frames, or other approved means. Where the required window/wall attenuation is above 40 dBA, special design features may be necessary that go beyond the normal double-glazed window and air conditioning. These may include specially designed windows (e.g., windows with small sizes, windows with air gaps, windows with thicker glazing, etc.) and additional building insulation.

Based on existing exterior noise levels and *CEQR Technical Manual* criteria, maximum noise levels at all noise receptor locations would remain below the 70 dBA CEQR threshold. Therefore, no additional attenuation would be required to ensure an interior noise level of 45 dBA or lower for residential and community facility uses and 50 dBA or lower for commercial office uses. As such, the Proposed Project would provide sufficient attenuation to achieve the *CEQR Technical Manual* interior noise level guidelines, and thus, the Proposed Actions would not result in any significant adverse noise impacts related to building attenuation requirements.

VIII. OTHER NOISE CONCERNS

Mechanical Equipment

All of the future building's mechanical systems (i.e., heating, ventilation, and air conditioning systems) will be designed to meet all applicable noise regulations and requirements and would be designed to produce noise levels that would not result in any significant increase in ambient noise levels. In addition, the building mechanical systems would be designed with enclosures where necessary to meet all applicable noise regulations (i.e., Subchapter 5 §24-227 of the New York City Noise Control Code and the NYC DOB

Building Code) and to avoid producing levels that would result in any significant increase in ambient noise levels. Therefore, the proposed action would not result in any significant increases in ambient noise levels.

Train Noise

An initial train noise impact screening analysis would be warranted if a new receptor would be located within 1,500 feet of existing rail activity and have a direct line of sight to that activity. As the Development Site is not within 1,500 of an existing rail line nor does the site have a direct line of sight to a rail activity, no initial train noise impact screening analysis is warranted.

Aircraft Noise

An initial aircraft noise impact screening analysis would be warranted if the new receptor would either generate or reroute aircraft or introduce a new receptor within a 65 dBA DNL contour. Since the Proposed Actions would not generate or reroute aircraft, and as the Proposed Rezoning Area is not within a 65 dBA DNL contour, no initial aircraft noise impact screening analysis is warranted.

APPENDIX I

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

RECORD OF DECISION

RECORD OF DECISION

K - Wythe Ave. Station
Operable Unit Number 02: Mihata Corporation Properties
State Superfund Project
Brooklyn, Kings County
Site No. 224069
February 2019

NEW YORK
STATE OF
OPPORTUNITY

Department of Environmental Conservation

Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

DECLARATION STATEMENT - RECORD OF DECISION

K - Wythe Ave. Station
Operable Unit Number: 02
State Superfund Project
Brooklyn, Kings County
Site No. 224069
February 2019

Statement of Purpose and Basis

This document presents the remedy for Operable Unit Number: 02: Mihata Corporation Properties of the K - Wythe Ave. Station site, a Class A inactive hazardous waste disposal site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375, and is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300), as amended.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for Operable Unit Number: 02 of the K - Wythe Ave. Station site and the public's input to the proposed remedy presented by the Department. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Description of Selected Remedy

The elements of the selected remedy are as follows:

1. A site cover (building) currently exists and will be maintained (by property owner) to allow for restricted residential use of the site. Any future site redevelopment will maintain the existing site cover, which consists either of the structures such as buildings, pavement, and sidewalks, or soil where the upper two feet of exposed surface soil meets the applicable soil cleanup objectives (SCOs) for restricted residential use. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6NYCRR part 375-6.7(d).

2. Imposition of an institutional control in the form of an environmental easement for the controlled property which will:

-the respondents or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);

-the use and development of the controlled property for restricted residential use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;

-the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or NYCDOH; and

-compliance with the Department approved Interim Site Management Plan.

3. An Interim Site Management Plan is required, which includes the following:

a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed in Paragraph 2 above.

Engineering Controls: The site cover discussed in Paragraph 1.

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;

- a provision for future investigation and remediation should large scale redevelopment occur, if any of the existing structures are demolished, or if the subsurface is otherwise made accessible. The nature and extent of contamination in areas where access was previously limited or unavailable will be immediately and thoroughly investigated pursuant to a plan approved by the Department. Based on the investigation results and the Department determination of the need for a remedy, a Remedial Action Work Plan (RAWP) will be developed for the final remedy for the site, including removal and/or treatment of any source areas to the extent feasible. Citizen Participation Plan (CPP) activities will continue through this process. Any necessary remediation will be completed prior to, or in association with, redevelopment. This includes all eight lots currently owned by the Mihata Corporation, identified as Block 2283, Lots 25, 28, 31, 33, 35, 38, 41, and 43;

-descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;

- a provision for evaluation of the potential for soil vapor intrusion for any occupied buildings on the site, including a provision for implementing actions recommended to address exposures related to soil vapor intrusion;

- a provision that should a building foundation or building slab be removed in the future a cover system consistent with that described in Paragraph 1 above will be placed in any areas where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);

-provisions for the management and inspection of the identified engineering controls;

-maintaining site access controls and Department notification; and

-the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

b. A monitoring plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

-a schedule of monitoring and frequency of submittals to the Department;

-monitoring for vapor intrusion for any buildings redeveloped or built the site, as may be required by the Institutional and Engineering Control Plan discussed above.

4. Green remediation principles and techniques will be implemented to the extent feasible in the site management of the remedy as per DER-31. The major green remediation components are as follows;

-Considering the environmental impacts of treatment technologies and remedy stewardship over the long-term;

-Reducing direct and indirect greenhouse gas and other emissions;

-Increasing energy efficiency and minimizing use of non-renewable energy;

-Conserving and efficiently managing resources and materials;

-Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste.

New York State Department of Health Acceptance

The New York State Department of Health (NYSDOH) concurs that the remedy for this site is protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

February 8, 2019
Date

Michael J. Ryan, P.E., Director
Division of Environmental Remediation

RECORD OF DECISION

K - Wythe Ave. Station
Brooklyn, Kings County
Site No. 224069
February 2019

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of hazardous wastes at the site has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of hazardous wastes at this site, as more fully described in this document, has contaminated various environmental media. Contaminants include hazardous substances and/or petroleum.

The New York State Inactive Hazardous Waste Disposal Site Remedial Program (also known as the State Superfund Program) is an enforcement program, the mission of which is to identify and characterize suspected inactive hazardous waste disposal sites and to investigate and remediate those sites found to pose a significant threat to public health and environment.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repositories:

Brooklyn Public Library
Greenpoint Branch
107 Norman Avenue at Leonard Street
Brooklyn, NY 11222
Phone: (718) 349-8504

Brooklyn Community Board 1
Attn.: Gerald A. Esposito
435 Graham Avenue
Brooklyn, NY 11211
Phone: (718) 389-0009

A public meeting was also conducted. At the meeting, the findings of the remedial investigation (RI) were presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period was held, during which verbal or written comments were accepted on the proposed remedy.

Comments on the remedy received during the comment period are summarized and addressed in the responsiveness summary section of the ROD.

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at http://www.dec.ny.gov/chemical/61092.html

SECTION 3: SITE DESCRIPTION AND HISTORY

Location:
The former Wythe Avenue Station is located in the Williamsburg neighborhood of Brooklyn, New York, Kings County. The site occupies nine parcels and is bounded by North 13th Street to the north, North 12th Street to the south, Berry Street to the east and Wythe Avenue to the west. These nine parcels are identified as Block 2283, Lots 1, 25, 28, 31, 33, 35, 38, 41 and 43, and comprise approximately 2.07 acres.

Site Features:
The site is comprised of commercial and industrial properties, and site topography is nearly flat. Lot 1 (OU1) contains a newly constructed twenty-one story hotel and retail stores, the remaining eight lots (OU2) comprise several one-story warehouse buildings on the east half of the site which are currently occupied by the Mirtex Trading Corporation.

Current Zoning and Land Use:
The area is zoned M1-1 and M1-2, which allow for light industrial and commercial uses. The site is surrounded by mixed use parcels, including light industrial, commercial and residential. The nearest residential area is within 100 feet to the southwest.

Past Use of the Site:
The site was operated as a Manufactured Gas Plant (MGP) holder station by Brooklyn Union Gas Co. from approximately 1903 to 1965. The station operated solely for gas distribution, and no gas production facilities were present at the site. Over the life of facility, manufactured gas, and possibly natural gas, based on the years of operation, was stored at the facility. In 1965 the holders and all associated MGP buildings were dismantled when the property was sold. Subsequent development of the site included two one-story buildings on the western two parcels,

used for manufacturing and warehousing, in 1968. The eastern portion of the site was redeveloped with several warehouse buildings between 1985 and 1991.

Operable Units:
The site was divided into two operable units. An operable unit represents a portion of a remedial program for a site that for technical or administrative reasons can be addressed separately to investigate, eliminate or mitigate a release, threat of a release or exposure pathway resulting from the site contamination.

Operable Unit 1 (OU1) consists of the parcel (Lot 1) owned by Wythe Berry LLC on the western half of the site (approximate size of 1.15 acres). Operable unit 2 (OU2) consists of the remaining eight parcels owned by Mihata Corporation on the eastern half of the site (approximate size of 0.92 acres).

Geology and Hydrogeology:
The site is underlain by up to 12 feet of urban fill material, then various layers of gravelly sands, silts and clays. Bedrock is approximately 100 feet below the ground surface.
Groundwater is encountered at depths of 7 to 10 feet beneath the site, and generally flows to the north in the western portion of the site, and to the east in the eastern portion of the site.

Operable Unit (OU) Number 02 is the subject of this document.

A Record of Decision was issued previously for OU 01.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to restricted-residential use (which allows for commercial use and industrial use) as described in Part 375-1.8(g) were evaluated.

A comparison of the results of the RI to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is included in the Tables for the media being evaluated in Exhibit A.

SECTION 5: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

The PRPs for the site, documented to date, include:

Brooklyn Union Gas d/b/a National Grid NY

Mihata Corporation (current property owner)

The Department and Brooklyn Union Gas Company d/b/a KeySpan Energy Delivery New York and KeySpan Gas East Corporation d/b/a KeySpan Energy Delivery Long Island entered into a Consent Order on August 10, 2007 (Index #A2-0552-0606). The entities under Order are now doing business as National Grid NY. The Order obligates the parties signing the Order to implement a full remedial program to address MGP-related contamination for this and a number of other former MGP and Holder Station sites.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A Remedial Investigation (RI) has been conducted. The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The field activities and findings of the investigation are described in the RI Report.

The following general activities are conducted during an RI:

- Research of historical information,
- Geophysical survey to determine the lateral extent of wastes,
- Test pits, soil borings, and monitoring well installations,
- Sampling of waste, surface and subsurface soils, groundwater, and soil vapor,
- Sampling of surface water and sediment,
- Ecological and Human Health Exposure Assessments.

The analytical data collected on this site includes data for:

- groundwater
- soil
- soil vapor

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has

developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. The tables found in Exhibit A list the applicable SCGs in the footnotes. For a full listing of all SCGs see: http://www.dec.ny.gov/regulations/61794.html

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a hazardous waste that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized in Exhibit A. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified for this Operable Unit at this site is/are:

benzo(a)anthracene	n-propylbenzene
benzo(a)pyrene	styrene
benzo(b)fluoranthene	1,2,4-trimethylbenzene
benzo[k]fluoranthene	1,3,5-trimethylbenzene
chrysene	butylbenzene
benzene	lead
ethylbenzene	indeno(1,2,3-CD)pyrene
xylene (mixed)	mercury
toluene	dibenz[a,h]anthracene
isopropylbenzene	arsenic
naphthalene	trichloroethene (TCE)

As illustrated in Exhibit A, the contaminant(s) of concern exceed the applicable SCGs for:

- groundwater
- soil
- soil vapor intrusion

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Record of Decision.

There were no IRMs performed at OU2 during the RI.

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water.

Based upon the resources and pathways identified and the toxicity of the contaminants of ecological concern at this site, a Fish and Wildlife Resources Impact Analysis (FWRIA) was deemed not necessary for OU 02.

Soil and groundwater were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), and pesticides. Based upon investigations conducted, the primary contaminants of concern for OU2 were BTEX and naphthalene (VOCs), and polycyclic aromatic hydrocarbons (PAHs) (SVOCs). a full investigation of these media could not be performed due to the presence of existing buildings.

The subsurface soil showed exceedances of the unrestricted soil cleanup objectives (SCOs) for benzene, toluene, ethylbenzene and xylene (BTEX), various PAH constituents, and several metals. Benzene was found as high as 330 parts per million (ppm), compared to an SCO of 0.06 ppm. Toluene was found as high as 840 ppm (0.7 SCO), ethylbenzene as high as 1,200 ppm (1 ppm SCO), and total xylenes as high as 1,600 ppm (0.26 ppm SCO). Naphthalene was detected as high as 1,300 ppm, compared to an SCO of 12 ppm. Several PAH compounds were detected as high as 13 ppm, with most having an SCO of 1 ppm. The metal constituents that exceeded the unrestricted SCOs were as follows: lead as high as 1,600 ppm (63 ppm SCO); mercury as high as 2.3 ppm (0.18 ppm SCO); and arsenic as high as 77 ppm (13 ppm SCO). Subsurface soil offsite had minor exceedances of only the unrestricted SCOs.

Groundwater - Groundwater was sampled at two on-site locations during the investigation due to existing buildings, with one location within the holder footprint, and the other at the site boundary. The location within the holder was impacted by SVOCs and lead, while the boundary location had impacts from VOCs and one SVOC. Lead was detected at a concentration of 35 parts per billion (ppb) (25 ppb standard); and the four PAHs detected (benz(a)anthracene, benz(a)pyrene, benzo(b)fluoranthene, and chrysene) had a maximum concentration of 0.25 ppb, with a standard of 0.002 ppb. The VOCs found to exceed standards were benzene at 2,200 ppb (1 ppb standard), toluene at 1,200 ppb (5 ppb standard), ethylbenzene at 600 ppb (5 ppb standard), xylene at 2,480 ppb (standard of 5 ppb), isopropyl benzene at 30 ppb (5 ppb standard), naphthalene at 1,200 ppb (guidance value of 10 ppb), n-propylbenzene at 42 ppb (5 ppb standard), styrene at 690 ppb (5 ppb standard), 1,2,4-trimethylbenzene at 600 ppb (5 ppb standard), and 1,3,5-trimethylbenzene at 160 ppb (5 ppb standard). Naphthalene was the SVOC which was found at 1,100 ppb (guidance value of 10 ppb). Groundwater sampled at one offsite location was found to be impacted by VOCs and SVOCs.

Soil Vapor- There were three soil vapor samples collected at OU2 during the investigation. The sub-slab vapor samples contained compounds, including BTEX and trimethylbenzenes, which may be associated with gas holder operations and which are common petroleum products. One compound, TCE, was detected at 11 micrograms per cubic meter. This compound is a chlorinated solvent, which is not associated with former gas holder operations.

6.4: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure.*

Remedial actions are complete and measures are in place to control the potential for coming in contact with residual contamination remaining in Operable Unit 1. Contaminated groundwater at the site is not used for drinking or other purposes and the area is served by a public water supply that is not affected by this contamination. Direct contact with contaminants in the soil is unlikely because the site is covered with pavement and buildings. Volatile organic compounds in the contaminated soil or contamination groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying structures and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. The potential exists for people to inhale site contaminants in indoor air due to soil vapor intrusion for any future on-site redevelopment of Operable Unit 2. Environmental sampling indicates that soil vapor intrusion is not a concern for off-site buildings.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

SECTION 7: SUMMARY OF THE SELECTED REMEDY

To be selected the remedy must be protective of human health and the environment, be cost-effective, comply with other statutory requirements, and utilize permanent solutions, alternative technologies or resource recovery technologies to the maximum extent practicable. The remedy must also attain the remedial action objectives identified for the site, which are presented in Section 6.5.

A summary of the remedial alternatives that were considered for this site is presented in Exhibit B. Cost information is presented in the form of present worth, which represents the amount of money invested in the current year that would be sufficient to cover all present and future costs associated with the alternative. This enables the costs of remedial alternatives to be compared on a common basis. As a convention, a time frame of 30 years is used to evaluate present worth costs for alternatives with an indefinite duration. This does not imply that operation, maintenance, or monitoring would cease after 30 years if remediation goals are not achieved. A summary of the Remedial Alternatives Costs is included as Exhibit C.

The basis for the Department's remedy is set forth at Exhibit D.

The selected remedy is referred to as the Interim Site Management Plan with Institutional Controls remedy.

The estimated present worth cost to implement the remedy is $667,043. The cost to construct the remedy is estimated to be $10,000 and the estimated average annual cost is $21,901.

The elements of the selected remedy are as follows:

1. A site cover (building) currently exists and will be maintained (by property owner) to allow for restricted residential use of the site. Any future site redevelopment will maintain the existing site cover, which consists either of the structures such as buildings, pavement, and sidewalks, or soil where the upper two feet of exposed surface soil meets the applicable soil cleanup objectives (SCOs) for restricted residential use. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6NYCRR part 375-6.7(d).

2. Imposition of an institutional control in the form of an environmental easement for the controlled property which will:

-the respondents or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);

-the use and development of the controlled property for restricted residential use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;

-the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or NYCDOH; and

-compliance with the Department approved Interim Site Management Plan.

3. An Interim Site Management Plan is required, which includes the following:

a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed in Paragraph 2 above.

Engineering Controls: The site cover discussed in Paragraph 1.

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;

- a provision for future investigation and remediation should large scale redevelopment occur, if any of the existing structures are demolished, or if the subsurface is otherwise made accessible. The nature and extent of contamination in areas where access was previously limited or unavailable will be immediately and thoroughly investigated pursuant to a plan approved by the Department. Based on the investigation results and the Department determination of the need for a remedy, a Remedial Action Work Plan (RAWP) will be developed for the final remedy for the site, including removal and/or treatment of any source areas to the extent feasible. Citizen Participation Plan (CPP) activities will continue through this process. Any necessary remediation will be completed prior to, or in association with, redevelopment. This includes all eight lots currently owned by the Mihata Corporation, identified as Block 2283, Lots 25, 28, 31, 33, 35, 38, 41, and 43;

-descriptions of the provisions of the environmental easement including any land use, and groundwater use restrictions;

- a provision for evaluation of the potential for soil vapor intrusion for any occupied buildings on the site, including a provision for implementing actions recommended to address exposures related to soil vapor intrusion;

- a provision that should a building foundation or building slab be removed in the future a cover system consistent with that described in Paragraph 1 above will be placed in any areas

where the upper two feet of exposed surface soil exceed the applicable soil cleanup objectives (SCOs);

-provisions for the management and inspection of the identified engineering controls;

-maintaining site access controls and Department notification; and

-the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

b. A monitoring plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

-a schedule of monitoring and frequency of submittals to the Department;

-monitoring for vapor intrusion for any buildings redeveloped or built the site, as may be required by the Institutional and Engineering Control Plan discussed above.

4. Green remediation principles and techniques will be implemented to the extent feasible in the site management of the remedy as per DER-31. The major green remediation components are as follows;

-Considering the environmental impacts of treatment technologies and remedy stewardship over the long-term;

-Reducing direct and indirect greenhouse gas and other emissions;

-Increasing energy efficiency and minimizing use of non-renewable energy;

-Conserving and efficiently managing resources and materials;

-Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste.

Exhibit A

Nature and Extent of Contamination

This section describes the findings of the Remedial Investigation (RI) for all environmental media that were evaluated. As described in Section 6.1, samples were collected from various environmental media to characterize the nature and extent of contamination.

For each medium for which contamination was identified, a table summarizes the findings of the investigation. The tables present the range of contamination found at the site in the media and compares the data with the applicable SCGs for the site. The contaminants are arranged into three categories; volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and inorganics (metals and cyanide). For comparison purposes, the SCGs are provided for each medium that allows for unrestricted use. For soil, if applicable, the Restricted Use SCGs identified in Section 4 and Section 6.1.1 are also presented.

Waste/Source Areas

As described in the RI report, waste/source materials were identified at the site and are impacting groundwater and soil.

Wastes are defined in 6 NYCRR Part 375-1.2(aw) and include solid, industrial and/or hazardous wastes. Source areas are defined in 6 NYCRR Part 375(au). Source areas are areas of concern at a site were substantial quantities of contaminants are found which can migrate and release significant levels of contaminants to another environmental medium. Potentially coal tar-related contaminants were identified at the site within the former MGP structure, which was a former gas holder tank.

The production of manufactured gas created waste products which are resistant to natural decay and can result in potential impacts to public health and the environment. The primary waste was an oily liquid known as coal tar, which formed as a condensate during storage prior to distribution. The coal tar contains certain hazardous substances in the VOC and SVOC chemical classes. Specific VOCs of concern are benzene, toluene, ethylbenzene and xylenes (BTEX). Specific SVOCs of concern are polycyclic aromatic hydrocarbons (PAHs) such as: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, dibenz(a,h)anthracene and indeno(1,2,3-cd)pyrene; as well as naphthalene.

Evidence of potential coal tar-related source areas were found at and adjacent to the site, in both soil and limited groundwater samples, and are potentially present within and adjacent to the former MGP gas holder structure. However, these areas could not be fully investigated due to the presence of several occupied buildings on the site. The waste/source areas identified will be addressed in the remedy selection process.

Groundwater

Groundwater samples were collected to assess groundwater conditions on and off-site. Sampling results indicate that benzene, toluene, ethylbenzene and xylene (BTEX), isopropylbenzene, n-propylbenzene, styrene, naphthalene, 1,3,5-trimethylbenzene and 1,2,4-trimethylbenzene (VOCs); naphthalene, benz(a)anthracene, benzo(b)fluoranthene, benz(a)pyrene, and chrysene (SVOCs); and lead (inorganic) exceed standards or guidance values at the site.

There were also five other inorganic compounds that exceeded the groundwater standards in both on-site and off-site monitoring wells. These compounds were antimony, iron, manganese, magnesium and sodium, and they are not associated with the former MGP operations.

Table # 1 - Groundwater

Detected Constituents	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
VOCs			
Benzene	ND – 2,200	1	1 of 2
Toluene	ND – 1,200	5	1 of 2
Ethylbenzene	ND – 600	5	1 of 2
Xylene (total isomers)	ND – 2,480	5	1 of 2
1,3,5-Trimethylbenzene	ND – 160	5	1 of 2
1,2,4-Trimethylbenzene	ND – 600	5	1 of 2
Isopropylbenzene	ND – 30	5	1 of 2
Naphthalene	ND – 1200	10	1 of 2
n-Propylbenzene	ND – 42	5	1 of 2
Styrene	ND – 690	5	1 of 2
SVOCs			
Benz(a)anthracene	ND – 0.14	0.002	1 of 2
Benzo(b)fluoranthene	ND – 0.18	0.002	1 of 2
Benzo(k)fluoranthene	ND – 0.1	0.002	1 of 2
Benzo(a)pyrene	ND – 0.25	ND	1 of 2
Chrysene	ND – 0.13	0.002	1 of 2
Naphthalene	ND – 1,100	10	1 of 2
Inorganics			
Lead	ND – 35	25	1 of 2

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.
b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

Based on the findings of the RI, the presence of MGP-related wastes has resulted in the contamination of groundwater. The site contaminants that are considered to be the primary contaminants of concern which will drive the future remediation of groundwater to be addressed by the remedy selection process are: benzene, toluene, ethylbenzene, xylene, naphthalene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and styrene.

Soil

Subsurface soil samples were collected and analyzed for VOCs, SVOCs, and inorganics during the remedial investigation (RI) to determine the nature and extent of impacts to soil as a result of the former MGP operations. These samples were collected from 0 to 40 feet below ground surface.

Benzene, toluene, ethylbenzene, and Total xylene (BTEX), and naphthalene were the VOCs found to exceed both the unrestricted and restricted residential SCOs on site. There were no VOCs that exceeded the unrestricted SCOs off-site. Eight individual PAH compounds (benz(a)anthracene, benzo(a)pyrene benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene) exceeded both unrestricted and restricted residential SCOs.

Inorganic compounds arsenic, lead, and mercury exceeded both unrestricted and restricted residential SCOs.

Table # 2 - Soil

Detected Constituents	Concentration Range Detected (ppm)[a]	Unrestricted SCG[b] (ppm)	Frequency Exceeding Unrestricted SCG	Restricted Use SCG[c] (ppm)	Frequency Exceeding Restricted SCG
VOCs					
Benzene	ND – 303	0.26	5 of 14	4.8	4 of 14
Toluene	ND – 840	0.7	6 of 14	100	4 of 14
Ethylbenzene	ND – 1,200	1.0	7 of 14	41	5 of 14
Xylene (total)	ND – 1,600	0.26	7 of 14	100	6 of 14
Naphthalene	ND – 1,300	12	7 of 14	100	6 of 14
SVOCs					
Benz(a)anthracene	ND – 15	1.0	6 of 14	1.0	6 of 14
Benzo(a)pyrene	ND – 18	1.0	6 of 14	1.0	6 of 14
Benzo(b)fluoranthene	ND – 13	1.0	6 of 14	1.0	6 of 14
Benzo(k)fluoranthene	ND – 7.3	0.8	4 of 14	3.9	2 of 14
Chrysene	ND – 12	1.0	5 of 14	3.9	4 of 14
Dibenz(a,h)anthracene	ND – 3.1	0.33	4 of 14	0.33	4 of 14
Indeno(1,2,3-cd)pyrene	ND – 16	0.5	5 of 14	0.5	5 of 14
Naphthalene	ND - 180	12	6 of 14	100	4 of 14
Inorganics					
Arsenic	ND – 77	13	3 of 14	16	1 of 14
Lead	ND – 1,600	63	11 of 14	400	4 of 14
Mercury	ND – 2.3	0.18	9 of 14	0.81	1 of 14

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;
b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.
c - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Public Health for Restricted Residential Use, unless otherwise noted.

Based on the findings of the RI, the presence of potentially MGP-related wastes has resulted in the contamination of soil within the holder tanks. The site contaminants identified in soil which are considered to be the primary contaminants of concern, to be addressed by the remedy selection process are benzene, toluene, ethylbenzene, xylene, naphthalene, PAHs, arsenic, and lead.

Soil Vapor

The evaluation of the potential for soil vapor intrusion resulting from the presence of site related soil or groundwater contamination was evaluated by the sampling of sub-slab soil vapor under the existing structures. There were no indoor air samples collected at the site.

Soil vapor samples were collected from the sub-slab of the existing warehouse buildings at OU2. The results indicate BTEX (benzene, toluene, ethylbenzene and xylene), 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, tetrachloroethene (PCE), trichloroethene (TCE), 1,2-dichloroethane, and trichlorofluoromethane were detected in on-site sub-slab vapor.

Based on the concentration detected the primary soil vapor contaminant is trichloroethene (TCE), although it should be noted that indoor air sampling was not conducted. There were also no detections of TCE in the groundwater sampling conducted at the site. This chlorinated solvent is not associated with the former MGP operations and may be related to subsequent site uses. The property owner was notified of these results after the sampling was conducted.

Exhibit B

Description of Remedial Alternatives

The following alternatives were considered based on the remedial action objectives (see Section 6.5) to address the contaminated media identified at the site as described in Exhibit A.

Alternative 1: No Action

The No Action Alternative is evaluated as a procedural requirement and as a basis for comparison. This alternative leaves the site in its present condition and does not provide any additional protection to public health and the environment.

Alternative 2: Interim Site Management with Institutional Controls

The Interim Site Management with Institutional Controls Alternative requires both institutional and engineering controls for the site. This alternative includes institutional controls, in the form of an environmental easement and an interim site management plan, and an engineering control in the form of a site cover, necessary to protect public health and the environment from any contamination identified at the site.

This alternative will include the following components:

- A site cover will be required to allow for restricted residential use of the site in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where a soil cover is to be used it will be a minimum of two feet of soil placed over a demarcation layer, with a minimum of six inches of soil of sufficient quality to maintain a vegetative layer. Soil cover material, including any fill material brought to the site, will meet the SCOs for cover material for the use of the site as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of site redevelopment. Such components may include, but are not limited to: pavement, concrete, paved surface parking areas, sidewalks, building foundations and building slabs.
- Placement of an institutional control in the form of an environmental easement to restrict the use of the on-site property to restricted residential, commercial or industrial uses and restrict the use of groundwater.
- Development of an Interim Site Management Plan (ISMP) to include institutional controls to address soil, groundwater and soil vapor contamination; and engineering controls to maintain the existing site cover (buildings and soil). This plan will include a provision for further investigation and remediation should large scale redevelopment occur, if the existing structures are demolished, or if the subsurface is otherwise accessible. Excavation or construction of any on site structures will be prohibited until such time as the above-stated further investigation and remediation has been completed. A provision for evaluation of the potential for soil vapor intrusion for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion, will also be included. The presumptive remedy for MGP contamination will be excavation of the former MGP structure (if deemed impacted) and MGP-related source material, unless an alternative, equivalent remedy is developed based on new information.

The cost to implement Alternative 2 has been estimated as follows:

Present Worth: $667,043
Capital Cost: $10,000
Annual Costs: $21,901

Alternative 3: Excavation to Pre-Release Conditions

Alternative 3 is designed as a site-wide remedy to restore the site soils to pre-release conditions. All soils containing site contaminants at levels higher than specified in the Unrestricted SCOs would be excavated using conventional excavating equipment and taken off site in dump trucks for treatment and/or disposal. The excavation would be backfilled with uncontaminated soils from off-site sources.

Because soil exceedances were detected in samples collected at depths up to 22 feet below ground surface, the volume of soil to be excavated would be very large, and would require demolition of all on-site structures. An estimated 30,000 cubic yards of soil would need to be excavated and trucked off site for thermal treatment and/or landfilling depending on the level of contamination contained.

After removal of the subsurface soils, end-point samples would be collected to confirm that all soils above the unrestricted SCOs have been removed. The excavation would then be backfilled with general fill that meets unrestricted SCOs.

Exhibit C

Remedial Alternative Costs

Remedial Alternative	Capital Cost ($)	Annual Costs ($)	Total Present Worth ($)
No Action	0	0	0
Site Management with ICs	10,000	21,901	667,043
Excavation to Pre-Release Conditions	NE	NE	NE

NE = Not Evaluated due to infeasibility of performing this alternative under current site conditions. (See Exhibit D).

Exhibit D

SUMMARY OF THE SELECTED REMEDY

The Department has selected Alternative 2, Interim Site Management with Institutional Controls as the remedy for this site. Alternative 2 would achieve the remediation goals for the site by protecting human health and the environment from exposure to impacted media. The elements of this remedy are described in Section 7.

Basis for Selection

The selected remedy is based on the results of the investigation completed to date and the existing structures onsite which hinder the ability to implement a full investigation and remedy. The criteria to which potential remedial alternatives are compared are defined in 6 NYCRR Part 375.

The first two evaluation criteria are termed "threshold criteria" and must be satisfied in order for an alternative to be considered for selection.

1. Protection of Human Health and the Environment. This criterion is an overall evaluation of each alternative's ability to protect public health and the environment.

Alternative 1 (No Action) does not include active remedial actions or other controls at the site, and thus will not provide any additional protection to human health and the environment compared to what currently exists. Additionally, this alternative will not comply with SCGs, since source material will remain in place and continue to pose a threat to both human health and the environment. Therefore, Alternative 1 is eliminated from further evaluation.

Alternative 2 (Interim Site Management with Institutional Controls) will protect human health and the environment first through the institutional control and ISMP provisions that minimize exposures, restrict groundwater use and require excavation protocols under current site conditions. In the long term, environmental protection will be provided by further investigation if the site buildings are removed or vacated and remediation when the site becomes accessible.

Alternative 3 also meets this threshold criterion since all impacted soil will be removed from the site.

2. Compliance with New York State Standards, Criteria, and Guidance (SCGs). Compliance with SCGs addresses whether a remedy will meet environmental laws, regulations, and other standards and criteria. In addition, this criterion includes the consideration of guidance which the Department has determined to be applicable on a case-specific basis.

Although Alternative 2 will not take immediate actions to address SCGs, the environmental easement and provisions in the ISMP will provide the framework for further investigation and remedial work should the site buildings be demolished, which would satisfy this criterion in the long term.

Alternative 3 will achieve compliance with the SCGs, but cannot be implemented until such time that the buildings are removed.

The next six "primary balancing criteria" are used to compare the positive and negative aspects of each of the remedial strategies.

3. Long-term Effectiveness and Permanence. This criterion evaluates the long-term effectiveness of the remedial alternatives after implementation. If wastes or treated residuals remain on-site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude of the remaining risks, 2) the adequacy of the engineering and/or institutional controls intended to limit the risk, and 3) the reliability of these controls.

For Alternative 2, site management will be effective in the long term once the provisions for performing remedial actions are implemented when the site becomes accessible. The placement of an environmental easement and implementation of the ISMP, will provide a reliable level of control of the site, and will provide the framework for a permanent remedy when the site becomes accessible.

Alternative 3 will be effective over the long term since the maximum amount of material would be removed from the site, and thus would not require any long term monitoring.

4. Reduction of Toxicity, Mobility or Volume. Preference is given to alternatives that permanently and significantly reduce the toxicity, mobility or volume of the wastes at the site.

Alternative 2 will control potential exposures through the use of institutional and engineering controls (site cover) and will not in the near term reduce the toxicity, mobility or volume of contaminants remaining in place. The ultimate degree of reduction will depend on the specific remedy that is implemented when the site becomes accessible.

Alternative 3 would remove all of the contaminated soil from the site, as well as any groundwater collected during dewatering operations.

5. Short-term Impacts and Effectiveness. The potential short-term adverse impacts of the remedial action upon the community, the workers, and the environment during the construction and/or implementation are evaluated. The length of time needed to achieve the remedial objectives is also estimated and compared against the other alternatives.

Alternative 2 would not have any short-term impacts, and would effectively protect human health in the short term through the implementation of institutional controls at the site.

Alternative 3 will have the greatest short-term impact due to the need to demolish the structures present at the site and relocate the current active business from the property. Significant efforts will also have to be undertaken during implementation to minimize impacts to human health and the environment with respect to air emissions, odor control, noise, dust suppression, and transportation/traffic in the local community. Excavation and off-site transport activities will generate noise associated with construction machinery, and truck traffic through the

surrounding community as contaminated soils are trucked out and backfill materials are trucked in. Due to the depth of soil removal, extensive excavation support, such as pile and lagging will need to be installed.

6. Implementability. The technical and administrative feasibility of implementing each alternative are evaluated. Technical feasibility includes the difficulties associated with the construction of the remedy and the ability to monitor its effectiveness. For administrative feasibility, the availability of the necessary personnel and materials is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, institutional controls, and so forth.

Alternative 2 is readily implementable as it initially is an administrative task. However, it will require significant oversight and interaction with the current owners to ensure the ISMP is implemented and conditions of the environmental easement are complied with. Future actions are expected to be implementable, without significant short-term impacts, once the buildings have been removed.

Alternative 3 is not readily implementable as National Grid is not the property owner and this alternative requires significant disruption to the ongoing business at the site. An agreement between the two parties would have to be reached prior to any work starting and the existing businesses on the property would have to be closed and the buildings removed before further investigation and remediation could begin. The use of standard construction materials and machinery provides the appearance that this alternative is technically and administratively feasible. However, the proposed depth of soil removal and the support of excavation required to be engineered and installed makes this alternative extremely challenging.

7. Cost-Effectiveness. Capital costs and annual operation, maintenance, and monitoring costs are estimated for each alternative and compared on a present worth basis. Although cost-effectiveness is the last balancing criterion evaluated, where two or more alternatives have met the requirements of the other criteria, it can be used as the basis for the final decision.

Alternative 2 is cost effective.

A cost estimate was not developed for Alternative 3 because it is not considered to be implementable at this time.

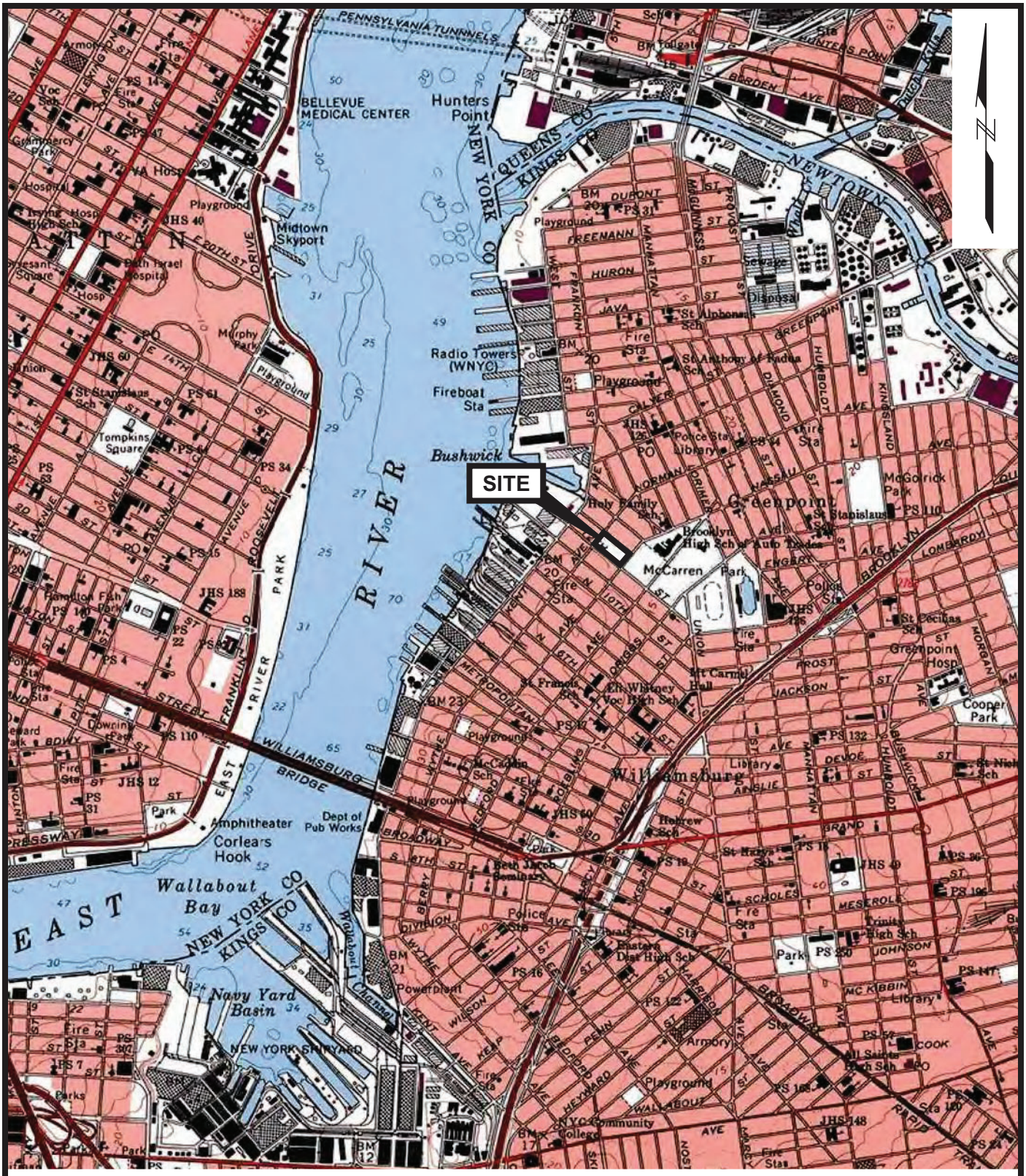
8. Land Use. When cleanup to pre-disposal conditions is determined to be infeasible, the Department may consider the current, intended, and reasonable anticipated future land use of the site and its surroundings in the selection of the soil remedy.

For the current use of the site as active warehousing, the site management elements of the selected remedy are protective of public health. Since the anticipated future use of the site may include restricted residential, Alternative 2 provides for the installation of a site cover, additional investigation, and remediation as necessary, to achieve restricted residential standards when the site use changes and large-scale redevelopment is planned.

The final criterion, Community Acceptance, is considered a "modifying criterion" and is taken into account after evaluating those above. It is evaluated after public comments on the Proposed Remedial Action Plan have been received.

9. Community Acceptance. Concerns of the community regarding the investigation, the evaluation of

alternatives, and the PRAP are evaluated. A responsiveness summary was prepared that describes public comments received and the manner in which the Department will address the concerns raised. Alternative 2 is being selected because, as described above, it satisfies the threshold criteria and provides the best balance of the balancing criterion.



SOURCE:
Map created with TOPO! ® ©2001 National Geographic
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0 2000 4000
SCALE, FEET

Construction Completion Report
Wythe Ave. (Berry St.) Holder Station Site
Borough of Brooklyn, New York

nationalgrid

GEI Consultants

Project 101970

SITE LOCATION MAP

Fig. 1

I:\Project\National Grid\Wythe Avenue\CCR\WYTHE-CCR-SLM.cdr



0 80' 160'

SCALE: 1" = 80'

SO□RCES:

1. AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE™ EARTH PRO *(htt□//□□□□g□□gle□□□m/earth/)*□IMAGERY DATE: 6/19/2014, ACCESSED ON: 1/19/2014.
2. SANBORN FIRE INSURANCE MAPS 1942, 1916 AND 1905.
3. SITE BOUNDARY WAS OBTAINED FROM NEW YORK CITY OPEN ACCESSIBLE SPACE INFORMATION SYSTEM *htt□//□□□□as□s□□□□et*□ ACCESSED MAY 2010.

LEGEND:

SITE BOUNDARY

HISTORIC STRUCTURE (APPROXIMATE)

Construction Completion Report
Wythe Ave. (Berry Street) Holder Station Site
Borough of Brooklyn, New York

nationalgrid

GEI Consultants

HISTORIC SITE CONDITIONS

Project 101970

Fig. 2

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Sample ID: / Sample Depth (feet bgs): / Sample Date:	Unrestricted SCO	Restricted Residential SCO	WA-SB-110 (0-4) 4/22/2014	WA-SB-110 (12-16) 4/22/2014	WA-SB-110 (16-20) 4/22/2014	WA-SB-110 (31-33) 4/22/2014
BTEX (mg/kg)						
Benzene	0.06	4.8	**3 J**	**75**	**61**	**0.003 J**
Ethylbenzene	1	41	**46**	**170**	**72**	**0.004 J**
Toluene	0.7	100	**23**	**840**	**480**	**0.00039 J**
o-Xylene	0.26	100	**26**	**520**	**210**	**0.00054 J**
m/p-Xylene	0.26	100	**56**	**1100**	**440**	**0.0011 J**
Total Xylene	0.26	100	**82**	**1600**	**650**	NA
Total BTEX	NE	NE	**236**	**4305**	**1913**	**0.009**
Other VOCs (mg/kg)						
Naphthalene	12	100	**410**	**1300**	**480**	0.0058 UJ
n-Propylbenzene	3.9	100	**2.6 J**	**45**	**19**	0.0012 UJ
1,2,4-Trimethylbenzene	3.6	52	**45**	**560**	**220**	0.0058 UJ
1,3,5-Trimethylbenzene	8.4	52	**16 J**	**160**	**65**	0.0058 UJ
Total VOCs	NE	NE	**805.8**	**6999.8**	**2900.3**	**0.0138**
PAHs (mg/kg)						
Naphthalene	12	100	**150**	**66**	**42**	0.19 U
Total PAHs	NE	NE	**186.1**	**73.14**	**45.86**	ND
Other SVOCs (mg/kg)						
Total SVOCs	NE	NE	**187.9**	**73.3**	**0.079**	ND
Metals (mg/kg)						
Arsenic	13	16	**14**	**7.6**	**4.9**	**4**
Copper	50	270	**98**	**14**	**12**	**22**
Lead	63	400	**840**	**4.8**	**4.1 J**	**7.5**
Mercury	0.18	0.81	**2.3**	0.09 U	0.08 U	0.08 U
Zinc	109	10000	**540**	**41**	**20**	**32**

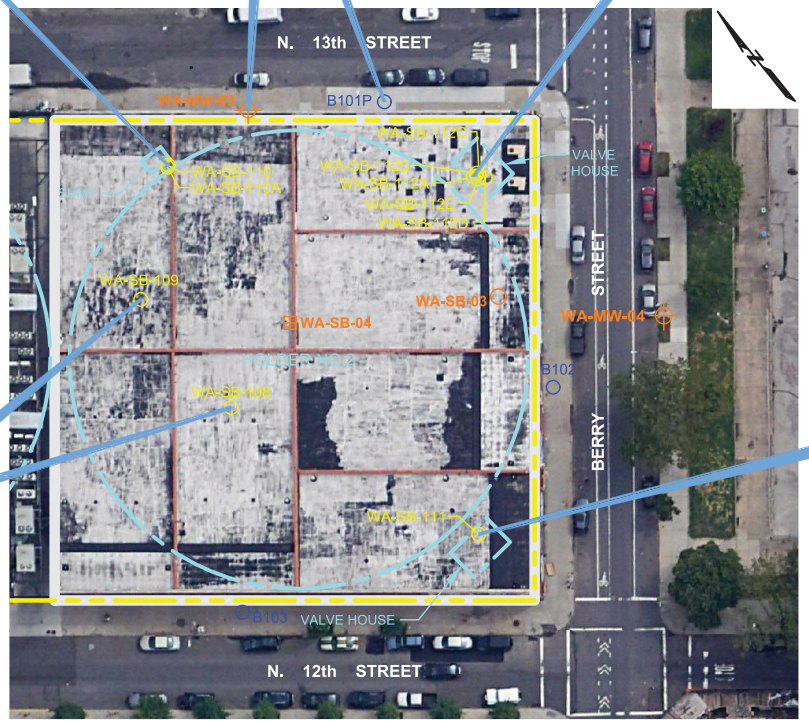
Sample ID: / Sample Depth (feet bgs): / Sample Date:	Unrestricted SCO	Restricted Residential SCO	WA-MW-03 (0.5-5) 12/15/2011	WA-MW-03 (15-17.5) 12/15/2011	WA-MW-03 (38-40) 12/15/2011
BTEX (mg/kg)					
Benzene	0.06	4.8	**0.006**	**36**	**0.0046**
Ethylbenzene	1	41	0.0029 U	**78**	**0.0026 J**
Toluene	0.7	100	**0.004 J**	**280**	**0.013**
o-Xylene	0.26	100	0.0058 U	**180**	**0.0042 J**
m,p-Xylene	0.26	100	0.0058 U	**370**	**0.0094**
Total BTEX	NE	NE	**0.01**	**944**	**0.0338**
Other VOCs (mg/kg)					
Naphthalene	12	100	0.014 U	**280**	0.014 U
n-Propylbenzene	3.9	100	0.0029 U	**15**	0.0028 U
1,2,4-Trimethylbenzene	3.6	52	0.014 U	**150**	0.014 UJ
1,3,5-Trimethylbenzene	8.4	52	0.014 U	**49**	**0.002 J**
Total VOCs	NE	NE	**0.01**	**1581.9**	**0.0372**
PAHs (mg/kg)					
Total PAHs	NE	NE	3.606	10	ND
Other SVOCs (mg/kg)					
Total SVOCs	NE	NE	**3.606**	**10.364**	ND
Metals (mg/kg)					
Copper	50	270	**78 J**	**19 J**	**24 J**
Lead	63	400	**250**	**7.3**	**8.1**
Mercury	0.18	0.81	**0.38 J**	0.08 U	0.09 U
Zinc	109	10000	**200 J**	**46 J**	**33 J**

Sample ID: / Sample Depth (feet bgs): / Sample Date:	Unrestricted SCO	Restricted Residential SCO	B101P (8-9.5) 2/26/2014	B101P (36-40) 2/27/2014
BTEX (mg/kg)				
Ethylbenzene	1	41	**200**	**0.00088 J**
Toluene	0.7	100	**95**	**0.0036 J**
o-Xylene	0.26	100	**160**	**0.0015 J**
m/p-Xylene	0.26	100	**360**	**0.0028 J**
Total BTEX	NE	NE	**815**	**0.0095**
Other VOCs (mg/kg)				
Naphthalene	12	100	**1100**	**0.0031 J**
n-Propylbenzene	3.9	100	**12 J**	0.0012 UJ
1,2,4-Trimethylbenzene	3.6	52	**240**	**0.00096 J**
1,3,5-Trimethylbenzene	8.4	52	**86**	**0.00032 J**
Total VOCs	NE	NE	**2622.7**	**0.0147**
PAHs (mg/kg)				
Naphthalene	12	100	**250**	0.19 U
Total PAHs	NE	NE	**286.177**	ND
Other SVOCs (mg/kg)				
Total SVOCs	NE	NE	**287.397**	ND
Metals (mg/kg)				
Lead	63	400	**84**	**7.4**

Sample ID: / Sample Depth (feet bgs): / Sample Date:	Unrestricted SCO	Restricted Residential SCO	WA-SB-112A (3.2-5) 5/8/2014
BTEX (mg/kg)			
Total BTEX	NE	NE	**0.0003**
Other VOCs (mg/kg)			
Total VOCs	NE	NE	**0.0018**
PAHs (mg/kg)			
Benzo(a)anthracene	1	1	**11**
Benzo(b)fluoranthene	1	1	**13**
Benzo(k)fluoranthene	0.8	3.9	**5.9**
Benzo(a)pyrene	1	1	**10**
Chrysene	1	3.9	**12**
Dibenz(a,h)anthracene	0.33	0.36	**1.7**
Indeno(1,2,3-cd)pyrene	0.5	0.5	**7.1**
Total PAHs	NE	NE	**147.94**
Other SVOCs (mg/kg)			
Total SVOCs	NE	NE	**149.64**
Metals (mg/kg)			
Arsenic	13	16	**77 J**
Copper	50	270	**440 J**
Lead	63	400	**1600**
Mercury	0.18	0.81	**0.42 J**
Nickel	30	310	**140**
Zinc	109	10000	**890**

Sample ID: / Sample Depth (feet bgs): / Sample Date:	Unrestricted SCO	Restricted Residential SCO	WA-SB-109 (0-4) 4/24/2014	WA-SB-109 (4-8) 4/24/2014	WA-SB-109 (8-10) 4/24/2014	WA-SB-109 (16-20) 4/24/2014	WA-SB-109 (15.5-17) 4/24/2014	WA-SB-109 (31-34) 4/25/2014
BTEX (mg/kg)								
Benzene	0.06	4.8	0.0015 U	0.0023 U	0.0016 U	**2.6**	**330 J**	**0.028 J**
Ethylbenzene	1	41	0.0015 U	0.0023 U	0.0016 U	**0.95**	**1200 J**	**0.031 J**
Toluene	0.7	100	0.0023 U	0.0034 U	0.0023 U	**7.1**	**150 J**	**0.022 J**
o-Xylene	0.26	100	0.003 U	0.0046 U	0.0031 U	**2.5**	**420 J**	**0.021 J**
m/p-Xylene	0.26	100	0.003 U	0.0046 U	0.0031 U	**5.4**	**920 J**	**0.039 J**
Total Xylene	0.26	100	0.003 U	0.0046 U	0.0031 U	**7.9**	**1300 J**	**0.06 J**
Total BTEX	NE	NE	ND	ND	ND	**18.55**	**3020**	**0.141**
Other VOCs (mg/kg)								
Naphthalene	12	100	0.0076 U	**0.0074 J**	0.0078 U	**2.3**	**450 J**	**0.043 J**
n-Propylbenzene	3.9	100	0.0015 U	0.0023 U	0.0016 U	**0.2**	**35 J**	**0.0014 J**
1,2,4-Trimethylbenzene	3.6	52	0.0076 U	0.011 U	0.0078 U	**2**	**340 J**	**0.016 J**
1,3,5-Trimethylbenzene	8.4	52	0.0076 U	0.011 U	0.0078 U	**0.61**	**100 J**	**0.0038 J**
Total VOCs	NE	NE	**0.021**	**0.053**	ND	**28.525**	**4682.5**	**0.2331**
PAHs (mg/kg)								
Benzo(a)anthracene	1	1	**3.2**	**3.5**	**7.5**	1.1 U	2.3 U	0.12 U
Benzo(b)fluoranthene	1	1	**5.1**	**5.3**	**13**	1.1 U	2.3 U	0.12 U
Benzo(k)fluoranthene	0.80	3.9	**1.6**	**1.9**	**6.4**	1.1 U	2.3 U	0.12 U
Benzo(a)pyrene	1	1	**3.4**	**3.7**	**18**	1.5 U	3 U	0.15 U
Chrysene	1	3.9	**3.9**	**3.7**	**7.6**	1.1 U	2.3 U	0.12 U
Dibenz(a,h)anthracene	0.33	0.33	**0.62**	**0.77**	**3.1**	1.1 U	2.3 U	0.12 U
Indeno(1,2,3-cd)pyrene	0.50	0.5	**2.6**	**3.2**	**16**	1.5 U	3 U	0.15 U
Naphthalene	12	100	**0.28 J**	**0.38**	**0.13 J**	**67**	**77**	0.19 U
Total PAHs	NE	NE	**45.19**	**47.41**	**109.47**	**75.5**	**86.6**	ND
Other SVOCs (mg/kg)								
Total SVOCs	NE	NE	**46.53**	**49.957**	**111.036**	**75.5**	**86.6**	ND
Metals (mg/kg)								
Copper	50	270	**75**	**54**	**5.4**	**10**	**16**	**25**
Lead	63	400	**170**	**76**	**7.4**	**1.4 J**	**3.6 J**	**4.8**
Mercury	0.18	0.81	**0.33**	**0.19**	0.08 U	0.07 U	0.08 U	0.08 U
Nickel	30	310	**52**	**41**	**4.1**	**9.9**	**32**	**14**
Zinc	109	10000	**150**	**82**	**9.6**	**22**	**32**	**34**

Sample ID: / Sample Depth (feet bgs): / Sample Date:	Unrestricted SCO	Restricted Residential SCO	SB-108 (20-21) 4/25/2014	SB-108 (33-35) 4/25/2014
BTEX (mg/kg)				
Benzene	0.06	4.8	**1.3 J**	**0.00036 J**
Ethylbenzene	1	41	**22 J**	**0.0014 J**
Toluene	0.7	100	**18 J**	0.0017 UJ
o-Xylene	0.26	100	**45 J**	**0.0025 J**
m/p-Xylene	0.26	100	**95 J**	**0.0053 J**
Total Xylene	0.26	100	**140 J**	**0.0078 J**
Total BTEX	NE	NE	**181.3**	**0.0096**
Other VOCs (mg/kg)				
Naphthalene	12	100	**100 J**	**0.011 J**
n-Propylbenzene	3.9	100	**4.5 J**	**0.00045 J**
1,2,4-Trimethylbenzene	3.6	52	**57 J**	**0.0047 J**
1,3,5-Trimethylbenzene	8.4	52	**18 J**	**0.0014 J**
Total VOCs	NE	NE	**414.52**	**0.0426**
PAHs (mg/kg)				
Total PAHs	NE	NE	**10.51**	ND
Other SVOCs (mg/kg)				
Total SVOCs	NE	NE	**10.51**	ND
Metals (mg/kg)				
Lead	63	400	**88 J**	**4 J**



Sample ID: / Sample Depth (feet bgs): / Sample Date:	Unrestricted SCO	Restricted Residential SCO	WA-SB-111 (4-5) 4/23/2014	WA-SB-111 (33-35) 4/23/2014
BTEX (mg/kg)				
Total BTEX	NE	NE	**0.0016**	ND
Other VOCs (mg/kg)				
Total VOCs	NE	NE	**0.0176**	**0.0314**
PAHs (mg/kg)				
Benzo(a)anthracene	1	1	**15**	0.13 U
Benzo(b)fluoranthene	1	1	**19**	0.13 U
Benzo(k)fluoranthene	0.8	3.9	**7.3**	0.13 U
Benzo(a)pyrene	1	1	**14**	0.17 U
Other SVOCs (mg/kg)				
Total SVOCs	NE	NE	**203.27**	ND
PAHs (mg/kg)				
Total PAHs	NE	NE	**200.18**	ND
Metals (mg/kg)				
Barium	350	400	**620 J**	**27 J**
Lead	63	400	**340**	**2.5 J**
Mercury	0.18	0.81	**0.63**	0.1 U
Zinc	109	10000	**490**	**15**

LEGEND:

- SITE BOUNDARY
- HISTORIC STRUCTURE (APPROXIMATE)
- OPERABLE UNIT 2 (OU2) BOUNDARY
- MONITORING WELL
- SOIL BORING / TEMPORARY GROUNDWATER SAMPLE
- SOIL BORING
- MIHATA SOIL BORING - PHASE 1
- ADDITIONAL INVESTIGATION BORING

6 NYCRR - NEW YORK STATE REGISTER AND OFFICIAL COMPILATION OF CODES, RULES AND REGULATIONS OF THE STATE OF NEW YORK

COMPARISON OF DETECTED RESULTS ARE PERFORMED AGAINST ONE OR MORE OF THE FOLLOWING NYCRR, CHAPTER IV, PART 375-6 SOIL CLEANUP OBJECTIVES (SCO)S: UNRESTRICTED USE, RESIDENTIAL, RESTRICTED-RESIDENTIAL, COMMERCIAL, INDUSTRIAL, PROTECTION OF ECOLOGICAL RESOURCES, OR PROTECTION OF GROUNDWATER

mg/kg	MILLIGRAMS/KILOGRAM OR PARTS PER MILLION (ppm)
feet bgs	FEET BELOW GROUND SURFACE
BTEX	BENZENE, TOLUENE, ETHLYBENZENE, AND XYLENE
PAHs	POLYCYCLIC AROMATIC HYDROCARBONS
VOCs	VOLATILE ORGANIC COMPOUNDS
SVOCs	SEMI-VOLATILE ORGANIC COMPOUNDS
NA	NOT ANALYZED
ND	NOT DETECTED; TOTAL CONCENTRATION IS LISTED AS ND BECAUSE NO COMPOUNDS WERE DETECTED IN THE GROUP
NE	NOT ESTABLISHED
J	ESTIMATED VALUE
U	INDICATES NOT DETECTED TO THE REPORTING LIMIT
UJ	NOT DETECTED AT OR ABOVE THE REPORTING LIMIT SHOWN AND THE REPORTING LIMIT IS ESTIMATED
BOLD	INDICATES A DETECTED CONCENTRATION
BOLD	INDICATES THAT THE DETECTED RESULT VALUE EXCEEDS THE UNRESTRICTED SCO
BOLD	INDICATES THAT THE DETECTED RESULT VALUE EXCEEDS THE RESTRICTED RESIDENTIAL SCO

0 80 160

SCALE: 1" = 80'

Additional Investigation Data Report
Wythe Ave. Station Site
Borough Of Brooklyn, New York

nationalgrid

GEI Consultants

Project 101970

SUBSURFACE SOIL ANALYTICAL RESULTS SUMMARY (mg/kg)

October 2018 Fig. 3a

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Sample ID: / Sample Depth (feet bgs): / Sample Date:	Unrestricted SCO	Restricted Residential SCO	WA-SB-110A (4-8) 4/23/2014	WA-SB-110A (8-12) 4/23/2014	WA-SB-110A (9-10) 4/23/2014	Duplicate of WA-SB-110A (9-10) 4/23/2014
BTEX (mg/kg)						
Benzene	0.06	4.8	**1.9 J**	**9.6**	**12 J**	**4 J**
Ethylbenzene	1	41	**26**	**64**	**140 J**	**40 J**
Toluene	0.7	100	**3.8**	**72**	**360 J**	**110 J**
o-Xylene	0.26	100	**25**	**110**	**350 J**	**120 J**
m/p-Xylene	0.26	100	**29**	**220**	**700 J**	**230 J**
Total Xylene	0.26	100	**54**	**330**	NA	NA
Total BTEX	NE	NE	**139.7**	**805.6**	**1562**	**504**
Other VOCs (mg/kg)						
Naphthalene	12	100	**220**	**260**	**880 J**	**340 J**
n-Propylbenzene	3.9	100	**4**	**8.7**	**27 J**	**8.8 J**
1,2,4-Trimethylbenzene	3.6	52	**81**	**110**	**360 J**	**130 J**
1,3,5-Trimethylbenzene	8.4	52	**23**	**35**	**110 J**	**39 J**
Total VOCs	NE	NE	**577.8**	**1416.3**	**3454.1**	**1246.4**
PAHs (mg/kg)						
Naphthalene	12	100	**91**	**38**	**170**	**180**
Total PAHs	NE	NE	**114.83**	**45.407**	**189.8**	**202.9**
Other SVOCs (mg/kg)						
Total SVOCs	NE	NE	**114.83**	**45.627**	**190.22**	**203.495**
Metals (mg/kg)						
Copper	50	270	**60**	**26**	**24**	**26**
Lead	63	400	**120**	**33**	**44 J**	**220 J**
Mercury	0.18	0.81	**0.22**	**0.06 J**	**0.27**	**0.45**
Zinc	109	10000	**220**	**74**	**72**	**110**

Sample ID: / Sample Depth (feet bgs): / Sample Date:	Unrestricted SCO	Restricted Residential SCO	WA-SB-03 (2-4) 4/23/2012	WA-SB-03 (10-12) 4/23/2012
BTEX (mg/kg)				
Total BTEX	NE	NE	ND	**0.0141**
Other VOCs (mg/kg)				
Total VOCs	NE	NE	ND	**0.1766**
PAHs (mg/kg)				
Benz[a]anthracene	1	1	**1.2**	**1.1**
Benzo[a]pyrene	1	1	**1.5**	**0.85**
Benzo[b]fluoranthene	1	1	**1.8**	**1.1**
Chrysene	1	3.9	**1.2**	**1.1**
Indeno[1,2,3-cd]pyrene	0.5	0.5	**1.2**	**0.55**
Total PAHs	NE	NE	**14.92**	**13.39**
Other SVOCs (mg/kg)				
Total SVOCs	NE	NE	**15.146**	**13.58**
Metals (mg/kg)				
Copper	50	270	**61 J**	**23 J**
Lead	63	400	**300**	**240**
Mercury	0.18	0.81	**0.32 J**	0.1 U
Nickel	30	310	**23**	**46**
Zinc	109	10000	**310**	**220**

Sample ID: / Sample Depth (feet bgs): / Sample Date:	Unrestricted SCO	Restricted Residential SCO	WA-MW-04 (0.5-5) 12/14/2011	WA-MW-04 (11-13) 12/14/2011
BTEX (mg/kg)				
Total BTEX	NE	NE	ND	ND
Other VOCs (mg/kg)				
Total VOCs	NE	NE	ND	**0.024**
PAHs (mg/kg)				
Benz[a]anthracene	1	1	**4.8**	0.12 U
Benzo[a]pyrene	1	1	**5**	0.16 U
Benzo[b]fluoranthene	1	1	**6**	0.12 U
Benzo[k]fluoranthene	0.8	3.9	**2.2**	0.12 U
Chrysene	1	3.9	**4.9**	0.12 U
Dibenz[a,h]anthracene	0.33	0.33	**0.81**	0.12 U
Indeno[1,2,3-cd]pyrene	0.5	0.5	**2.8 J**	0.16 U
Total PAHs	NE	NE	**59.8**	**0.164**
Other SVOCs (mg/kg)				
Total SVOCs	NE	NE	**60.4**	**0.164**
Metals (mg/kg)				
Barium	350	400	**2400 J**	**30 J**
Copper	50	270	**70 J**	**12 J**
Lead	63	400	**400 J**	**9.2 J**
Mercury	0.18	0.81	**0.59 J**	**0.09 J**
Zinc	109	10000	**2300 J**	**34**

Sample ID: / Sample Depth (feet bgs): / Sample Date:	Unrestricted SCO	Restricted Residential SCO	WA-SB-04 (2-3) 4/20/2012	Duplicate of WA-SB-04 (2-3) 4/20/2012	WA-SB-04 (10-12) 4/20/2012
BTEX (mg/kg)					
Ethylbenzene	1	41	0.0027 U	0.0029 U	**1.6**
m,p-Xylene	0.26	100	0.0054 U	0.0058 U	**1.8**
Total BTEX	NE	NE	ND	ND	**4.07**
Other VOCs (mg/kg)					
Acetone	0.05	100	**0.06**	**0.056**	6.7 UJ
Naphthalene	12	100	**0.0071 J**	**0.0027 J**	**76**
Total VOCs	NE	NE	**0.0671**	**0.0587**	**104.5**
PAHs (mg/kg)					
Benz[a]anthracene	1	1	**2.4**	**3.3**	**4.7**
Benzo[a]pyrene	1	1	**2.7**	**3.4**	**3.6**
Benzo[b]fluoranthene	1	1	**3.5**	**4.6**	**4.6**
Benzo[k]fluoranthene	0.8	3.9	**1.2**	**1.6**	**1.6**
Chrysene	1	3.9	**2.6**	**3.4**	**4.6**
Dibenz[a,h]anthracene	0.33	0.33	**0.51 J**	**0.57 J**	**0.48 J**
Indeno[1,2,3-cd]pyrene	0.5	0.5	**2.3**	**2.9 J**	**2.4**
Naphthalene	12	100	1.8 U	1.9 U	**75**
Total PAHs	NE	NE	**30.86**	**41.42**	**218.28**
Other SVOCs (mg/kg)					
Total SVOCs	NE	NE	**30.86**	**42.87**	**223.28**
Metals (mg/kg)					
Copper	50	270	**40**	**49**	**120**
Lead	63	400	**170**	**210**	**1400**
Mercury	0.18	0.81	**0.3 J**	**0.46 J**	**0.49 J**
Nickel	30	310	**26**	**24**	**43**
Zinc	109	10000	**150**	**180**	**690**

Sample ID: / Sample Depth (feet bgs): / Sample Date:	Unrestricted SCO	Restricted Residential SCO	B103 (15.5-20) 2/26/2014	B103 (32-34) 2/28/2014
BTEX (mg/kg)				
Total BTEX	NE	NE	**0.0023**	**0.0098**
Other VOCs (mg/kg)				
Total VOCs	NE	NE	**0.0058**	**0.0098**
PAHs (mg/kg)				
Total PAHs	NE	NE	ND	ND
Other SVOCs (mg/kg)				
Total SVOCs	NE	NE	ND	ND



Sample ID: / Sample Depth (feet bgs): / Sample Date:	Unrestricted SCO	Restricted Residential SCO	B102 (25.5-27.5) 3/3/2014	B102 (32-36) 3/3/2014	Duplicate of: B102 (32-36) 3/3/2014
BTEX (mg/kg)					
Total BTEX	NE	NE	**0.4843**	ND	ND
Other VOCs (mg/kg)					
Total VOCs	NE	NE	**1.0247**	ND	ND
PAHs (mg/kg)					
Total PAHs	NE	NE	ND	ND	ND
Other SVOCs (mg/kg)					
Total SVOCs	NE	NE	ND	ND	ND
Metals (mg/kg)					
Arsenic	13	16	**4.4**	**9.4**	**14**

LEGEND:

- SITE BOUNDARY
- HISTORIC STRUCTURE (APPROXIMATE)
- OPERABLE UNIT 2 (OU2) BOUNDARY
- MONITORING WELL
- SOIL BORING / TEMPORARY GROUNDWATER SAMPLE
- SOIL BORING
- MIHATA SOIL BORING - PHASE 1
- ADDITIONAL INVESTIGATION BORING

6 NYCRR - NEW YORK STATE REGISTER AND OFFICIAL COMPILATION OF CODES, RULES AND REGULATIONS OF THE STATE OF NEW YORK

COMPARISON OF DETECTED RESULTS ARE PERFORMED AGAINST ONE OR MORE OF THE FOLLOWING NYCRR, CHAPTER IV, PART 375-6 SOIL CLEANUP OBJECTIVES (SCO)S: UNRESTRICTED USE, RESIDENTIAL, RESTRICTED-RESIDENTIAL, COMMERCIAL, INDUSTRIAL, PROTECTION OF ECOLOGICAL RESOURCES, OR PROTECTION OF GROUNDWATER

mg/kg	MILLIGRAMS/KILOGRAM OR PARTS PER MILLION (ppm)
feet bgs	FEET BELOW GROUND SURFACE
BTEX	BENZENE, TOLUENE, ETHLYBENZENE, AND XYLENE
PAHs	POLYCYCLIC AROMATIC HYDROCARBONS
VOCs	VOLATILE ORGANIC COMPOUNDS
SVOCs	SEMI-VOLATILE ORGANIC COMPOUNDS
NA	NOT ANALYZED
ND	NOT DETECTED; TOTAL CONCENTRATION IS LISTED AS ND BECAUSE NO COMPOUNDS WERE DETECTED IN THE GROUP
NE	NOT ESTABLISHED
J	ESTIMATED VALUE
U	INDICATES NOT DETECTED TO THE REPORTING LIMIT
UJ	NOT DETECTED AT OR ABOVE THE REPORTING LIMIT SHOWN AND THE REPORTING LIMIT IS ESTIMATED
BOLD	INDICATES A DETECTED CONCENTRATION
BOLD	INDICATES THAT THE DETECTED RESULT VALUE EXCEEDS THE UNRESTRICTED SCO
BOLD	INDICATES THAT THE DETECTED RESULT VALUE EXCEEDS THE RESTRICTED RESIDENTIAL SCO

0 80 160

SCALE: 1" = 80'

Additional Investigation Data Report
Wythe Ave. Station Site
Borough Of Brooklyn, New York

nationalgrid

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Project 101970

SUBSURFACE SOIL ANALYTICAL RESULTS SUMMARY (mg/kg)

October 2018 Fig. 3b

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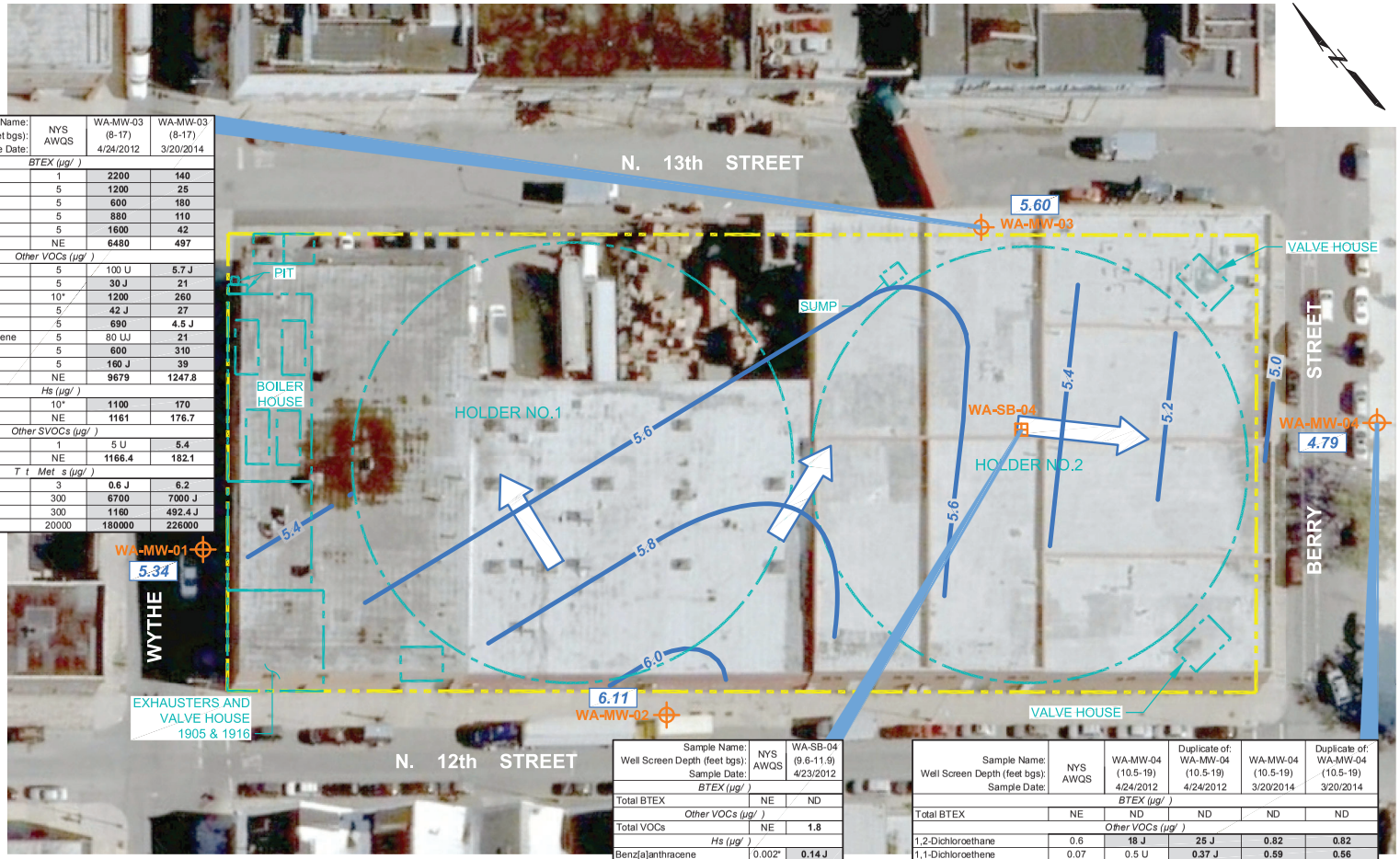


Sample Name: / Well Screen Depth (feet bgs): / Sample Date:	NYS AWQS	WA-MW-03 (8-17) 4/24/2012	WA-MW-03 (8-17) 3/20/2014
BTEX (µg/)			
Benzene	1	**2200**	**140**
Toluene	5	**1200**	**25**
Ethylbenzene	5	**600**	**180**
o-Xylene	5	**880**	**110**
m/p-Xylene	5	**1600**	**42**
Total BTEX	NE	**6480**	**497**
Other VOCs (µg/)			
n-Butylbenzene	5	100 U	**5.7 J**
Isopropyl benzene	5	**30 J**	**21**
Naphthalene	10*	**1200**	**260**
n-Propylbenzene	5	**42 J**	**27**
Styrene	5	**690**	**4.5 J**
1,2,4,5-Tetramethylbenzene	5	80 UJ	**21**
1,2,4-Trimethylbenzene	5	**600**	**310**
1,3,5-Trimethylbenzene	5	**160 J**	**39**
Total VOCs	NE	**9679**	**1247.8**
Hs (µg/)			
Naphthalene	10*	**1100**	**170**
Total PAHs	NE	**1161**	**176.7**
Other SVOCs (µg/)			
Phenol	1	5 U	**5.4**
Total SVOCs	NE	**1166.4**	**182.1**
T t Met s (µg/)			
Antimony	3	**0.6 J**	**6.2**
Iron	300	**6700**	**7000 J**
Manganese	300	**1160**	**492.4 J**
Sodium	20000	**180000**	**226000**

Sample Name: / Well Screen Depth (feet bgs): / Sample Date:	NYS AWQS	WA-SB-04 (9.6-11.9) 4/23/2012
BTEX (µg/)		
Total BTEX	NE	ND
Other VOCs (µg/)		
Total VOCs	NE	**1.8**
Hs (µg/)		
Benz[a]anthracene	0.002*	**0.14 J**
Benzo[a]pyrene	ND	**0.25**
Benzo[b]fluoranthene	0.002*	**0.18 J**
Benzo[k]fluoranthene	0.002*	**0.1 J**
Chrysene	0.002*	**0.13 J**
Total PAHs	NE	**7.23**
Other SVOCs (µg/)		
Total SVOCs	NE	**7.23**
T t Met s (µg/)		
Iron	300	**4200**
Lead	25	**35**
Magnesium	35000*	**65000**
Sodium	20000	**120000**

Sample Name: / Well Screen Depth (feet bgs): / Sample Date:	NYS AWQS	WA-MW-04 (10.5-19) 4/24/2012	Duplicate of: WA-MW-04 (10.5-19) 4/24/2012	WA-MW-04 (10.5-19) 3/20/2014	Duplicate of: WA-MW-04 (10.5-19) 3/20/2014
BTEX (µg/)					
Total BTEX	NE	ND	ND	ND	ND
Other VOCs (µg/)					
1,2-Dichloroethane	0.6	**18 J**	**25 J**	**0.82**	**0.82**
1,1-Dichloroethene	0.07	0.5 U	**0.37 J**	**0.59**	**0.56**
1,2-Dichloropropane	1	**1.5**	**2**	1 U	1 U
Total VOCs	NE	**24.08**	**33.05**	**7.97**	**7.99**
Hs (µg/)					
Total PAHs	NE	**4.3**	**4.02**	**0.45**	**0.57**
Other SVOCs (µg/)					
Total SVOCs	NE	**4.39**	**4.02**	**0.45**	**0.57**
T t Met s (µg/)					
Iron	300	**17000**	**16000**	**24300 J**	**24100 J**
Magnesium	35000*	**24000**	**22000**	**46900**	**46600**
Manganese	300	**4160**	**3900**	**8972 J**	**8724 J**
Sodium	20000	**230000**	**230000**	**255000**	**238000**

LEGEND:

- SITE BOUNDARY
- HISTORIC STRUCTURE (APPROXIMATE)
- MONITORING WELL
- SOIL BORING / TEMPORARY GROUNDWATER SAMPLE
- 5.0 — GROUNDWATER CONTOUR (FEET NAVD)
- 6.11 — GROUNDWATER ELEVATION (FEET NAVD)
- INFERRED GROUNDWATER FLOW DIRECTION

NYS AWQS - NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES FOR GA GROUNDWATER

NE	NOT ESTABLISHED
ND	NOT DETECTED
J	ESTIMATED VALUE
U	INDICATES NOT DETECTED TO THE REPORTING LIMIT FOR ORGANIC ANALYSIS AND THE METHOD DETECTION LIMIT FOR INORGANIC ANALYSIS
*	INDICATES THE VALUE IS A GUIDANCE VALUE AND NOT A STANDARD
BOLD	INDICATES DETECTED CONCENTRATION
BOLD	INDICATES THAT THE DETECTED CONCENTRATION IS ABOVE THE NYS AWQS OBJECTIVE IT WAS COMPARED TO
µg/	MICROGRAMS PER LITER OR PARTS PER BILLION (ppb)
BTEX	BENZENE, TOLUENE, ETHLYBENZENE, AND XYLENE
PAHs	POLYCYCLIC AROMATIC HYDROCARBONS
VOCs	VOLATILE ORGANIC COMPOUNDS
SVOCs	SEMI-VOLATILE ORGANIC COMPOUNDS

SOURCES:

1. BING AERIAL IMAGERY © 2010 MICROSOFT CORPORATION AND ITS DATA SUPPLIERS ACCESSED ON 07/23/12 VIA ARCGIS ONLINE (www.arcgis.com).
2. SANBORN FIRE INSURANCE MAPS 1942, 1916 AND 1905.
3. SITE BOUNDARY WAS OBTAINED FROM NEW YORK CITY OPEN ACCESSIBLE SPACE INFORMATION SYSTEM http://www.oasisnyc.net, ACCESSED MAY 2010.

0 50 100

SCALE: 1" = 50'

Additional Investigation Data Report
Wythe Ave. Station Site
Borough Of Brooklyn, New York

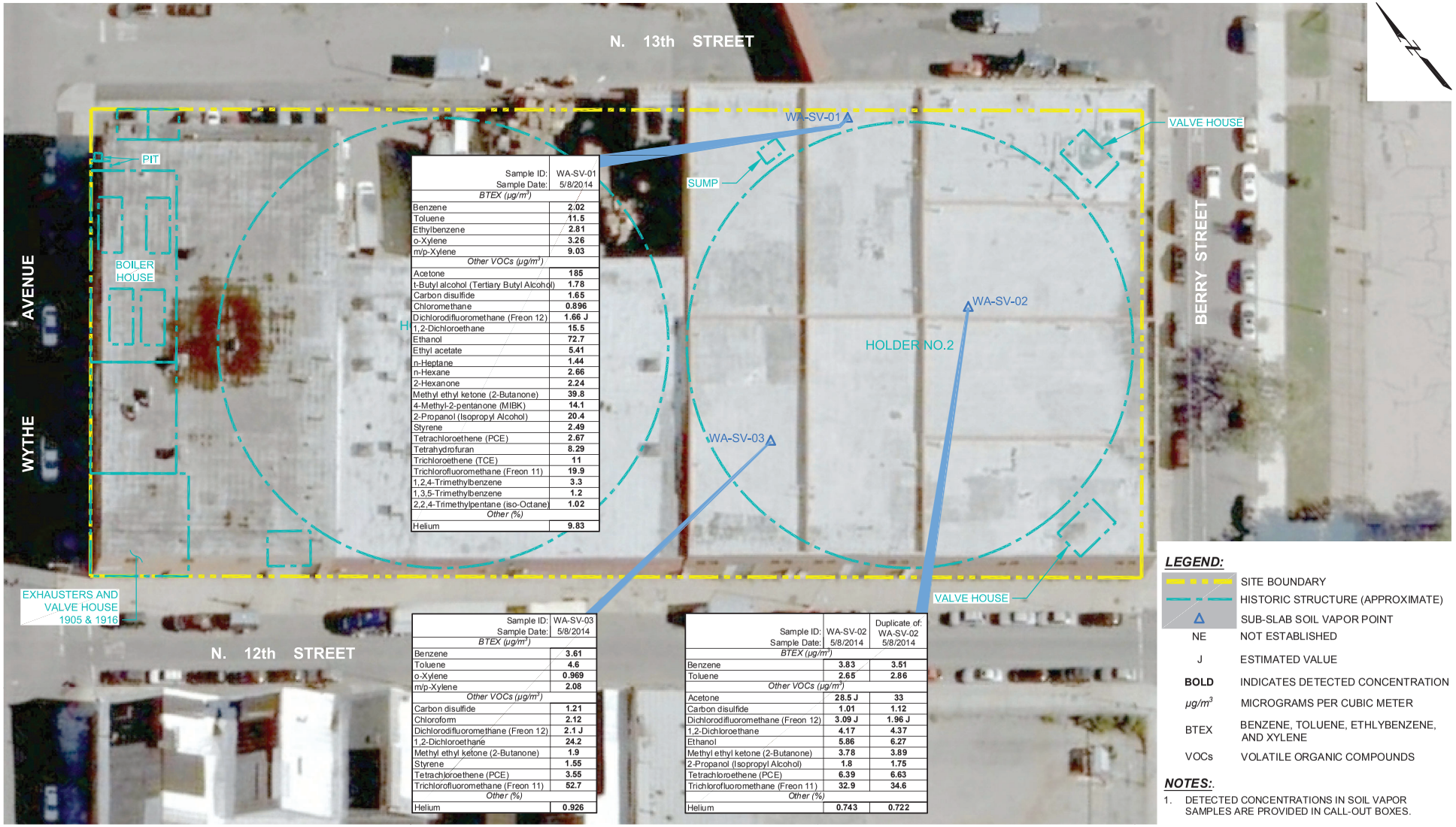
nationalgrid

GEI Consultants

MARCH 2014 OVERBURDEN GROUNDWATER CONTOURS (ft) AND GROUNDWATER ANALYTICAL RESULTS SUMMARY (µg/L)

Project 101970 | July 2015 | Fig. 4

\\gtb1v-fs01\ I:\Project\National Grid\Wythe Avenue\CAD\Figures\AIDR\101970_AIDR_DATA_2.dwg - 12/10/2018



Sample ID:	WA-SV-01
Sample Date:	5/8/2014
BTEX (µg/m³)	
Benzene	2.02
Toluene	11.5
Ethylbenzene	2.81
o-Xylene	3.26
m/p-Xylene	9.03
Other VOCs (µg/m³)	
Acetone	185
t-Butyl alcohol (Tertiary Butyl Alcohol)	1.78
Carbon disulfide	1.65
Chloromethane	0.896
Dichlorodifluoromethane (Freon 12)	1.66 J
1,2-Dichloroethane	15.5
Ethanol	72.7
Ethyl acetate	5.41
n-Heptane	1.44
n-Hexane	2.66
2-Hexanone	2.24
Methyl ethyl ketone (2-Butanone)	39.8
4-Methyl-2-pentanone (MIBK)	14.1
2-Propanol (Isopropyl Alcohol)	20.4
Styrene	2.49
Tetrachloroethene (PCE)	2.67
Tetrahydrofuran	8.29
Trichloroethene (TCE)	11
Trichlorofluoromethane (Freon 11)	19.9
1,2,4-Trimethylbenzene	3.3
1,3,5-Trimethylbenzene	1.2
2,2,4-Trimethylpentane (iso-Octane)	1.02
Other (%)	
Helium	9.83

Sample ID:	WA-SV-03
Sample Date:	5/8/2014
BTEX (µg/m³)	
Benzene	3.61
Toluene	4.6
o-Xylene	0.969
m/p-Xylene	2.08
Other VOCs (µg/m³)	
Carbon disulfide	1.21
Chloroform	2.12
Dichlorodifluoromethane (Freon 12)	2.1 J
1,2-Dichloroethane	24.2
Methyl ethyl ketone (2-Butanone)	1.9
Styrene	1.55
Tetrachloroethene (PCE)	3.55
Trichlorofluoromethane (Freon 11)	52.7
Other (%)	
Helium	0.926

Sample ID:	WA-SV-02	Duplicate of: WA-SV-02
Sample Date:	5/8/2014	5/8/2014
BTEX (µg/m³)		
Benzene	3.83	3.51
Toluene	2.65	2.86
Other VOCs (µg/m³)		
Acetone	28.5 J	33
Carbon disulfide	1.01	1.12
Dichlorodifluoromethane (Freon 12)	3.09 J	1.96 J
1,2-Dichloroethane	4.17	4.37
Ethanol	5.86	6.27
Methyl ethyl ketone (2-Butanone)	3.78	3.89
2-Propanol (Isopropyl Alcohol)	1.8	1.75
Tetrachloroethene (PCE)	6.39	6.63
Trichlorofluoromethane (Freon 11)	32.9	34.6
Other (%)		
Helium	0.743	0.722

LEGEND:

	SITE BOUNDARY
	HISTORIC STRUCTURE (APPROXIMATE)
△	SUB-SLAB SOIL VAPOR POINT
NE	NOT ESTABLISHED
J	ESTIMATED VALUE
BOLD	INDICATES DETECTED CONCENTRATION
µg/m³	MICROGRAMS PER CUBIC METER
BTEX	BENZENE, TOLUENE, ETHLYBENZENE, AND XYLENE
VOCs	VOLATILE ORGANIC COMPOUNDS

NOTES:

1. DETECTED CONCENTRATIONS IN SOIL VAPOR SAMPLES ARE PROVIDED IN CALL-OUT BOXES.

SOURCES:

1. BING AERIAL IMAGERY © 2010 MICROSOFT CORPORATION AND ITS DATA SUPPLIERS ACCESSED ON 07/23/12 VIA ARCGIS ONLINE (www.arcgis.com).
2. SANBORN FIRE INSURANCE MAPS 1942, 1916 AND 1905.
3. SITE BOUNDARY WAS OBTAINED FROM NEW YORK CITY OPEN ACCESSIBLE SPACE INFORMATION SYSTEM http://www.oasisnyc.net, ACCESSED MAY 2010.

0 40 80

SCALE: 1" = 40'

Additional Investigation Data Report
Wythe Ave. Station Site
Borough Of Brooklyn, New York

nationalgrid

GEI

SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS SUMMARY (µg/m3)

Project 101970 | April 2015 | Fig. 5

\\gtb1v-fs01\ I:\Project\National Grid\Wythe Avenue\CAD\Figures\AIDR\101970_AIDR_DATA_2.dwg - 12/10/2018

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

K-Wythe Ave. Station
Operable Unit No. 02
State Superfund Project
Brooklyn, Kings County, New York
Site No. 224069

The Proposed Remedial Action Plan (PRAP) for the K-Wythe Ave. Station site was prepared by the New York State Department of Environmental Conservation (the Department) in consultation with the New York State Department of Health (NYSDOH) and was issued to the document repositories on November 30, 2018. The PRAP outlined the remedial measure proposed for the contaminated soil and groundwater at the K-Wythe Ave. site.

The release of the PRAP was announced by sending a notice to the public contact list, informing the public of the opportunity to comment on the proposed remedy.

A public meeting was held on December 12, 2018, which included a presentation of the site characterization for the K-Wythe Ave. Station, as well as a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. The public comment period for the PRAP ended on December 30, 2018.

This responsiveness summary responds to all questions and comments raised during the public comment period. The following are the comments received, with the Department's responses:

COMMENT 1: If groundwater contamination was found outside of the holder, why isn't the groundwater being treated to contain the plume?

RESPONSE 1: Groundwater was found to exceed applicable standards and guidance values in at one location adjacent to the site along N. 13th Street, in the sidewalk. Additional groundwater investigations have been conducted along the north side of N. 13th Street which had low-level (below standards) to no detections of these same constituents, demonstrating that there is not a plume of groundwater leaving the site.

COMMENT 2: Since the current site cover (concrete floors) were constructed some time ago, they were not designed to prevent soil vapor intrusion. What about current air conditions within the buildings?

RESPONSE 2: During the site characterization, soil vapor samples were collected from below the concrete floors. No actions were needed to address soil vapor intrusion at that time and the results were presented to the current property owner at the time the site characterization report was submitted to the Department. The proposed remedy includes a provision for further evaluation of soil vapor intrusion in the future.

COMMENT 3: Will National Grid be conducting the cleanup or someone else?

RESPONSE 3: At this time, the Department expects National Grid to conduct any required remediation at the site.

COMMENT 4: At another site (brownfield) near the Wythe Ave. site, there was a strong odor that permeated throughout the neighborhood during the excavation. When the resident complained via a telephone call about the odor she was told it was a nuisance odor and there was nothing to worry about. What can be done to assure the residents that there isn't any concern with the odor?

RESPONSE 4: Excavation is not being proposed aa an element of the remedy. In the event that large scale redevelopment occurs in the future and excavation is necessary, a Health and Safety Plan (HASP), a Community Air Monitoring Plan (CAMP), and an Odor Control Plan will be developed for the protection of workers and the community.

COMMENT 5: Odor was also noted at another excavation in the area; better contact signage is needed.

RESPONSE 5: The Department agrees with the concern about better site contact signage, and notes that if a resident is unsure of who to call, the Region 2 DEC office staff is available to help determine if the site is in a cleanup program and provide contact information. For future reference, the Region 2 Environmental Remediation office phone number is (718) 482-4995.

COMMENT 6: The fact sheet provided is very vague on levels of contamination and details. These fact sheets should contain more information.

RESPONSE 6: The intent of the fact sheet is to provide basic site information, contact information, and announce the date and location of the public meeting. The public meeting presentation is where the specific levels of contamination, details about the investigation conducted, and proposed remedial activities are given. Additionally, levels of contamination are presented in the Site Characterization and Additional Investigation Reports which are available for review at the document repositories listed in the fact sheets.

Donald P. Campbell, Project Manager, National Grid, submitted a letter (dated **December 28, 2018**) which included the following comments:

COMMENT 7: Section 5: Enforcement Status. This information requires an update. With regard to the listing of National Grid USA as a PRP, National Grid is not a PRP at the Wythe Ave. Station site because National Grid USA was not involved in the ownership or operation of the Site. Its subsidiary, The Brooklyn Union Gas Company d/b/a National Grid NY, is a legally distinct corporation that has the financial wherewithal to perform the work. With regard to KeySpan Gas East corporation d/b/a KeySpan Energy Delivery Long Island, it is not the relevant respondent for the Wythe Ave. Station site. Therefore, National Grid suggests the following text for Section 5: (suggested edits followed).

RESPONSE 7: The Department will modify the text as follows:

Brooklyn Union Gas d/b/a National Grid NY
Mihata Corporation (current property owner)

The Department and Brooklyn Union Gas Company d/b/a KeySpan Energy Delivery New York and KeySpan Gas East Corporation d/b/a KeySpan Energy Delivery Long Island entered into a Consent Order on August 10, 2007 (Index #A2-0552-0606). The entities under Order are now doing business as National Grid NY. The Order obligates the parties signing the Order to implement a full remedial program to address MGP-related contamination for this and a number of other former MGP and Holder Station sites.

COMMENT 8: Section 5: Enforcement Status. National Grid's December 28, 2018 letter included a recitation of national Grid's position regarding Site history and Potentially Responsible Parties.

RESPONSE 8: The comment is noted. National Grid's letter is part of the Administrative Record held by the document repositories for the Site.

APPENDIX B

Administrative Record

Administrative Record

K-Wythe Ave. Station
Operable Unit No. 02
State Superfund Project
Brooklyn, Kings County, New York
Site No. 224069

1. Proposed Remedial Action Plan for the K-Wythe Ave. Station site, Operable Unit No. 02, dated November 30, 2018, prepared by the Department.

2. Order on Consent, Index No. A2-0552-0606, between the Department and The Brooklyn Union Gas Company d/b/a KeySpan Energy Delivery New York & KeySpan Gas East Corporation d/b/a KeySpan Energy Delivery Long Island, Respondents, executed in August 2007.

3. "Site Characterization Report for the Wythe Ave. (Berry St.) Former Holder Station, Brooklyn, New York, AOC Index No.:A2-0552-0606, Site No. 224069", March 2013, prepared by GEI Consultants, Inc.

4. "Additional Investigation Data Report, Wythe Ave. Station Site, Brooklyn, NY, NYSDEC Site #224069", July 2015, prepared by GEI Consultants, Inc., P.C.

5. Letter dated December 28, 2018 from Donald Campbell, National Grid.

APPENDIX II

WATERFRONT REVITALIZATION PROGRAM (WPR)
CONSISTANCY ASSESSMENT FORM

FOR INTERNAL USE ONLY	WRP No. _____
Date Received: _____	DOS No. _____

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form

Proposed actions that are subject to CEQR, ULURP or other local, state or federal discretionary review procedures, and that are within New York City's Coastal Zone, must be reviewed and assessed for their consistency with the *New York City Waterfront Revitalization Program (WRP)* which has been approved as part of the State's Coastal Management Program.

This form is intended to assist an applicant in certifying that the proposed activity is consistent with the WRP. It should be completed when the local, state, or federal application is prepared. The completed form and accompanying information will be used by the New York State Department of State, the New York City Department of City Planning, or other city or state agencies in their review of the applicant's certification of consistency.

A. APPLICANT INFORMATION

Name of Applicant: Mihata Corp.

Name of Applicant Representative: Hadi Hajjar

Address: 20 Berry Street, Brooklyn, NY 11249

Telephone: 212.929.5656 Email: mirtex@aol.com

Project site owner (if different than above): _____

B. PROPOSED ACTIVITY

If more space is needed, include as an attachment.

1. Brief description of activity

The Applicant, Mihata Corp., is seeking a number of discretionary actions from the New York City Planning Commission (CPC) in order to facilitate the redevelopment of 20 Berry Street (Block 2283, Lots 25, 28, 31, 33, 35, 38, 41, and 43) in the Greenpoint neighborhood of Brooklyn Community District 1. The Proposed Actions would include: a zoning map amendment to rezone the development site from an M1-1 to an M1-2 district; a zoning text amendment that would modify ZR Section 74-96 to map the project area as an Industrial Business Incentive Area (IBIA); a special permit to increase the maximum permitted floor area ratio (FAR) and to modify the off-street parking and loading berth requirements. The Proposed Project would be a new 10-story, 135-foot tall commercial and manufacturing building with one cellar level and one sub-cellar level. The 284,713-gsf (192,665-zsf) building would contain approximately 45,283 gsf of local retail space (approximately 23,733 gsf of which would be below grade); 126,442 gsf of office space; 11,879 gsf of restaurant space; and 37,643 gsf of light industrial space providing a "Required Industrial Use" pursuant to IBIA regulations. The Proposed Project would include 80 below-grade parking spaces, three loading berths, and two curb cuts. It is expected that the proposed development would be completed by 2025.

2. Purpose of activity

The Applicant believes the requested rezoning and special permits would encourage the development of a new building with a desirable blend of commercial and light industrial uses which would further the mission of the Greenpoint-Williamsburg IBZ by strengthening the commercial and industrial/manufacturing character of these neighborhoods.

The Proposed Project would also help retain the industrial character of the Greenpoint and Williamsburg neighborhoods. Historically, this portion of the neighborhood primarily contained industrial/manufacturing, distribution, and warehousing uses. Although recent development in the neighborhood has primarily consisted of warehouse conversions and new construction of developments containing entertainment, hotel, and retail uses, the area continues to contain a number of industrial and manufacturing spaces. By leveraging the demand for commercial space, the Proposed Actions would also require the creation of approximately 37,643 gsf of new light industrial space, which would be protected and could not be converted to commercial or community facility space.

C. PROJECT LOCATION

Borough: Brooklyn Tax Block/Lot(s): Block 2283; Lots 25, 28, 31, 33, 35, 38, 41, and 43

Street Address: 20 Berry Street

Name of water body (if located on the waterfront): n/a

D. REQUIRED ACTIONS OR APPROVALS

Check all that apply.

City Actions/Approvals/Funding

City Planning Commission ☑ Yes ☐ No

- ☐ City Map Amendment
- ☑ Zoning Map Amendment
- ☑ Zoning Text Amendment
- ☐ Site Selection – Public Facility
- ☐ Housing Plan & Project
- ☑ Special Permit
  (if appropriate, specify type: ☑ Modification ☐ Renewal ☑ other) Expiration Date: _____
- ☐ Zoning Certification
- ☐ Zoning Authorizations
- ☐ Acquisition – Real Property
- ☐ Disposition – Real Property
- ☐ Other, explain: _____
- ☐ Concession
- ☐ UDAAP
- ☐ Revocable Consent
- ☐ Franchise

Board of Standards and Appeals ☐ Yes ☑ No

- ☐ Variance (use)
- ☐ Variance (bulk)
- ☐ Special Permit
  (if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____

Other City Approvals

- ☐ Legislation
- ☐ Rulemaking
- ☐ Construction of Public Facilities
- ☐ 384 (b) (4) Approval
- ☐ Other, explain: _____
- ☐ Funding for Construction, specify: _____
- ☐ Policy or Plan, specify: _____
- ☐ Funding of Program, specify: _____
- ☐ Permits, specify: _____

State Actions/Approvals/Funding

- ☐ State permit or license, specify Agency: _____ Permit type and number: _____
- ☐ Funding for Construction, specify: _____
- ☐ Funding of a Program, specify: _____
- ☐ Other, explain: _____

Federal Actions/Approvals/Funding

- ☐ Federal permit or license, specify Agency: _____ Permit type and number: _____
- ☐ Funding for Construction, specify: _____
- ☐ Funding of a Program, specify: _____
- ☐ Other, explain: _____

Is this being reviewed in conjunction with a Joint Application for Permits? ☐ Yes ☐ No

E. LOCATION QUESTIONS

1. Does the project require a waterfront site? ☐ Yes ☑ No
2. Would the action result in a physical alteration to a waterfront site, including land along the shoreline, land under water or coastal waters? ☐ Yes ☑ No
3. Is the project located on publicly owned land or receiving public assistance? ☐ Yes ☑ No
4. Is the project located within a FEMA 1% annual chance floodplain? *(6.2)* ☐ Yes ☑ No
5. Is the project located within a FEMA 0.2% annual chance floodplain? *(6.2)* ☐ Yes ☑ No
6. Is the project located adjacent to or within a special area designation? *See Maps – Part III of the NYC WRP. If so, check appropriate boxes below and evaluate policies noted in parentheses as part of WRP Policy Assessment (Section F).* ☐ Yes ☑ No

   ☐ Significant Maritime and Industrial Area (SMIA) (*2.1*)
   ☐ Special Natural Waterfront Area (SNWA) (*4.1*)
   ☐ Priority Maritime Activity Zone (PMAZ) (*3.5*)
   ☐ Recognized Ecological Complex (REC) (*4.4*)
   ☐ West Shore Ecologically Sensitive Maritime and Industrial Area (ESMIA) (*2.2, 4.2*)

F. WRP POLICY ASSESSMENT

Review the project or action for consistency with the WRP policies. For each policy, check Promote, Hinder *or* Not Applicable (N/A). *For more information about consistency review process and determination, see* ***Part I*** *of the NYC Waterfront Revitalization Program. When assessing each policy, review the full policy language, including all sub-policies, contained within* ***Part II*** *of the WRP. The relevance of each applicable policy may vary depending upon the project type and where it is located (i.e. if it is located within one of the special area designations).*

For those policies checked Promote *or* Hinder, *provide a written statement on a separate page that assesses the effects of the proposed activity on the relevant policies or standards. If the project or action promotes a policy, explain how the action would be consistent with the goals of the policy. If it hinders a policy, consideration should be given toward any practical means of altering or modifying the project to eliminate the hindrance. Policies that would be advanced by the project should be balanced against those that would be hindered by the project. If reasonable modifications to eliminate the hindrance are not possible, consideration should be given as to whether the hindrance is of such a degree as to be substantial, and if so, those adverse effects should be mitigated to the extent practicable.*

		Promote	Hinder	N/A
1	**Support and facilitate commercial and residential redevelopment in areas well-suited to such development.**	☑	☐	☐
1.1	Encourage commercial and residential redevelopment in appropriate Coastal Zone areas.	☑	☐	☐
1.2	Encourage non-industrial development with uses and design features that enliven the waterfront and attract the public.	☐	☐	☑
1.3	Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.	☑	☐	☐
1.4	In areas adjacent to SMIAs, ensure new residential development maximizes compatibility with existing adjacent maritime and industrial uses.	☐	☐	☑
1.5	Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, pursuant to WRP Policy 6.2.	☐	☐	☑

		Promote	Hinder	N/A
2	**Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.**	☐	☐	☑
2.1	Promote water-dependent and industrial uses in Significant Maritime and Industrial Areas.	☐	☐	☑
2.2	Encourage a compatible relationship between working waterfront uses, upland development and natural resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☑
2.3	Encourage working waterfront uses at appropriate sites outside the Significant Maritime and Industrial Areas or Ecologically Sensitive Maritime Industrial Area.	☐	☐	☑
2.4	Provide infrastructure improvements necessary to support working waterfront uses.	☐	☐	☑
2.5	Incorporate consideration of climate change and sea level rise into the planning and design of waterfront industrial development and infrastructure, pursuant to WRP Policy 6.2.	☐	☐	☑
3	**Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation.**	☐	☐	☑
3.1.	Support and encourage in-water recreational activities in suitable locations.	☐	☐	☑
3.2	Support and encourage recreational, educational and commercial boating in New York City's maritime centers.	☐	☐	☑
3.3	Minimize conflicts between recreational boating and commercial ship operations.	☐	☐	☑
3.4	Minimize impact of commercial and recreational boating activities on the aquatic environment and surrounding land and water uses.	☐	☐	☑
3.5	In Priority Marine Activity Zones, support the ongoing maintenance of maritime infrastructure for water-dependent uses.	☐	☐	☑
4	**Protect and restore the quality and function of ecological systems within the New York City coastal area.**	☐	☐	☑
4.1	Protect and restore the ecological quality and component habitats and resources within the Special Natural Waterfront Areas.	☐	☐	☑
4.2	Protect and restore the ecological quality and component habitats and resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☑
4.3	Protect designated Significant Coastal Fish and Wildlife Habitats.	☐	☐	☑
4.4	Identify, remediate and restore ecological functions within Recognized Ecological Complexes.	☐	☐	☑
4.5	Protect and restore tidal and freshwater wetlands.	☐	☐	☑
4.6	In addition to wetlands, seek opportunities to create a mosaic of habitats with high ecological value and function that provide environmental and societal benefits. Restoration should strive to incorporate multiple habitat characteristics to achieve the greatest ecological benefit at a single location.	☐	☐	☑
4.7	Protect vulnerable plant, fish and wildlife species, and rare ecological communities. Design and develop land and water uses to maximize their integration or compatibility with the identified ecological community.	☐	☐	☑
4.8	Maintain and protect living aquatic resources.	☐	☐	☑

		Promote	Hinder	N/A
5	**Protect and improve water quality in the New York City coastal area.**	☐	☐	☑
5.1	Manage direct or indirect discharges to waterbodies.	☐	☐	☑
5.2	Protect the quality of New York City's waters by managing activities that generate nonpoint source pollution.	☐	☐	☑
5.3	Protect water quality when excavating or placing fill in navigable waters and in or near marshes, estuaries, tidal marshes, and wetlands.	☐	☐	☑
5.4	Protect the quality and quantity of groundwater, streams, and the sources of water for wetlands.	☐	☐	☑
5.5	Protect and improve water quality through cost-effective grey-infrastructure and in-water ecological strategies.	☐	☐	☑
6	**Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.**	☐	☐	☑
6.1	Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the site, the use of the property to be protected, and the surrounding area.	☐	☐	☑
6.2	Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in *New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms*) into the planning and design of projects in the city's Coastal Zone.	☐	☐	☑
6.3	Direct public funding for flood prevention or erosion control measures to those locations where the investment will yield significant public benefit.	☐	☐	☑
6.4	Protect and preserve non-renewable sources of sand for beach nourishment.	☐	☐	☑
7	**Minimize environmental degradation and negative impacts on public health from solid waste, toxic pollutants, hazardous materials, and industrial materials that may pose risks to the environment and public health and safety.**	☐	☐	☑
7.1	Manage solid waste material, hazardous wastes, toxic pollutants, substances hazardous to the environment, and the unenclosed storage of industrial materials to protect public health, control pollution and prevent degradation of coastal ecosystems.	☐	☐	☑
7.2	Prevent and remediate discharge of petroleum products.	☐	☐	☑
7.3	Transport solid waste and hazardous materials and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.	☐	☐	☑
8	**Provide public access to, from, and along New York City's coastal waters.**	☐	☐	☑
8.1	Preserve, protect, maintain, and enhance physical, visual and recreational access to the waterfront.	☐	☐	☑
8.2	Incorporate public access into new public and private development where compatible with proposed land use and coastal location.	☐	☐	☑
8.3	Provide visual access to the waterfront where physically practical.	☐	☐	☑
8.4	Preserve and develop waterfront open space and recreation on publicly owned land at suitable locations.	☐	☐	☑

		Promote	Hinder	N/A
8.5	Preserve the public interest in and use of lands and waters held in public trust by the State and City.	☐	☐	☑
8.6	Design waterfront public spaces to encourage the waterfront's identity and encourage stewardship.	☐	☐	☑
9	**Protect scenic resources that contribute to the visual quality of the New York City coastal area.**	☐	☐	☑
9.1	Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.	☐	☐	☑
9.2	Protect and enhance scenic values associated with natural resources.	☐	☐	☑
10	**Protect, preserve, and enhance resources significant to the historical, archaeological, architectural, and cultural legacy of the New York City coastal area.**	☐	☐	☑
10.1	Retain and preserve historic resources, and enhance resources significant to the coastal culture of New York City.	☐	☐	☑
10.2	Protect and preserve archaeological resources and artifacts.	☐	☐	☑

G. CERTIFICATION

The applicant or agent must certify that the proposed activity is consistent with New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program. If this certification cannot be made, the proposed activity shall not be undertaken. If this certification can be made, complete this Section.

"The proposed activity complies with New York State's approved Coastal Management Program as expressed in New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program, and will be conducted in a manner consistent with such program."

Applicant/Agent's Name: _____

Address: _____

Telephone: _____ Email: _____

Applicant/Agent's Signature: _____

Date: _____

Submission Requirements

For all actions requiring City Planning Commission approval, materials should be submitted to the Department of City Planning.

For local actions not requiring City Planning Commission review, the applicant or agent shall submit materials to the Lead Agency responsible for environmental review. A copy should also be sent to the Department of City Planning.

For State actions or funding, the Lead Agency responsible for environmental review should transmit its WRP consistency assessment to the Department of City Planning.

For Federal direct actions, funding, or permits applications, including Joint Applicants for Permits, the applicant or agent shall also submit a copy of this completed form along with his/her application to the NYS Department of State Office of Planning and Development and other relevant state and federal agencies. A copy of the application should be provided to the NYC Department of City Planning.

The Department of City Planning is also available for consultation and advisement regarding WRP consistency procedural matters.

New York City Department of City Planning
Waterfront and Open Space Division
120 Broadway, 31st Floor
New York, New York 10271
212-720-3696
wrp@planning.nyc.gov
www.nyc.gov/wrp

New York State Department of State
Office of Planning and Development
Suite 1010
One Commerce Place, 99 Washington Avenue
Albany, New York 12231-0001
518-474-6000
www.dos.ny.gov/opd/programs/consistency

Applicant Checklist

- ☐ Copy of original signed NYC Consistency Assessment Form
- ☐ Attachment with consistency assessment statements for all relevant policies
- ☐ For Joint Applications for Permits, one (1) copy of the complete application package
- ☐ Environmental Review documents
- ☐ Drawings (plans, sections, elevations), surveys, photographs, maps, or other information or materials which would support the certification of consistency and are not included in other documents submitted. All drawings should be clearly labeled and at a scale that is legible.
- ☐ Policy 6.2 Flood Elevation worksheet, if applicable. For guidance on applicability, refer to the WRP Policy 6.2 Guidance document available at www.nyc.gov/wrp

APPENDIX III

New York City Landmarks Preservation Commission (LPC)

Review Letter

Landmarks Preservation Commission

1 Centre Street
9th Floor North
New York, NY 10007

Voice (212)-669-7700
Fax (212)-669-7960
http://nyc.gov/landmarks

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / LA-CEQR-K
Project: 20 BERRY STREET
Date Received: 10/20/2022

Properties with no Architectural or Archaeological significance:

1) 132 NORTH 13 STREET, BBL: 3022830025
2) 120 NORTH 13 STREET, BBL: 3022830028
3) 20 BERRY STREET, BBL: 3022830031
4) 24 BERRY STREET, BBL: 3022830033
5) 28 BERRY STREET, BBL: 3022830035
6) 32 BERRY STREET, BBL: 3022830038
7) 129 NORTH 12 STREET, BBL: 3022830041
8) 125 NORTH 12 STREET, BBL: 3022830043

Comments:

LPC DESIGNATED AND S/NR ELIGIBLE HECLA IRON WORKS, 100-118 NORTH 11 STREET WITHIN RADIUS. No impacts anticipated.

Gina Santucci

10/24/2022

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 36693_FSO_DNP_10242022.docx